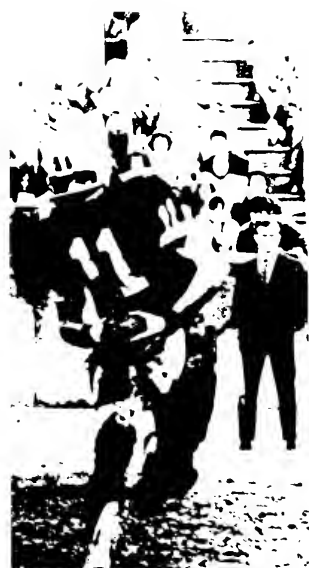




William & Mary

UNDERGRADUATE CATALOG 1973-74



GENERAL STATEMENT OF POLICY

Within the limits of its facilities and its obligations as a State university, the College of William and Mary opens the possibility of admission to all qualified students without regard to sex, race, color, age, religion, or national origin; the facilities and services of the College are open to all enrolled students on the same basis, and all standards and policies of the institution, including those governing employment, are applied accordingly.

Note: This catalog provides announcements for the 1973-74 academic year and a record for the 1972-73 year. It is current until August, 1974.

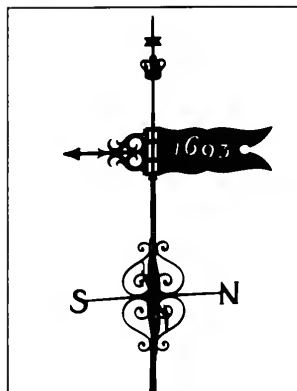
Catalogs are issued for other College programs as follows:

School of Business Administration
School of Education
Graduate Studies in Arts and Sciences,
and Marine Science
Marshall-Wythe School of Law
Summer Sessions

Bulletin of The College of William and Mary—Undergraduate Catalog Issue
Vol. 67, No. 5

August, 1973

Entered at the Post-Office at Williamsburg, Virginia, July 3, 1926, under an Act of August 24, 1912, as second-class matter. Issued twelve times: two issues in January, one issue in February, two issues in March, one issue in April, one issue in June, two issues in August, one issue in September, and two in December.

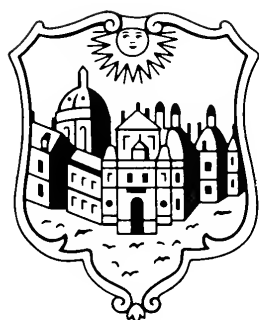


THE COLLEGE OF

William & Mary

IN VIRGINIA

BULLETIN—
THE UNDERGRADUATE CATALOG



ANNOUNCEMENTS FOR THE
TWO HUNDRED AND EIGHTY-FIRST YEAR
1973-1974

A Record of Session 1972-1973

WILLIAMSBURG, VIRGINIA

The Coat of Arms May 14, 1694.

CORRESPONDENCE DIRECTORY

To facilitate prompt attention, inquiries should be directed to the following:

ACADEMIC AFFAIRS

George R. Healy, *Vice President for Academic Affairs*

ADMISSIONS

Robert P. Hunt, *Dean of Admissions*

BUSINESS MATTERS, FEES AND EXPENSES

William J. Carter, *Vice President for Business Affairs*

DEVELOPMENT, ANNUITIES AND GIFTS

Warren Heemann, *Vice President for College Development*

ALUMNI AFFAIRS

Gordon C. Vliet, *Executive Secretary, Society of the Alumni*

EMPLOYMENT OF STUDENTS, STUDENT LOANS, SCHOLARSHIPS

E. Leon Looney, *Director of Student Aid*

GRADUATE STUDIES

John E. Selby, *Graduate Dean of Arts and Sciences*

Marvin M. Stanley, *Associate Dean for Graduate Studies, School of Business Administration*

Richard B. Brooks, *Dean of School of Education*

Richard A. Williamson, *Associate Dean of Marshall-Wythe School of Law*

William J. Hargis, Jr., *Dean of School of Marine Science*

PUBLIC INFORMATION SERVICES

Ross L. Weeks, Jr., *Director*

RECORDS AND TRANSCRIPTS

Dudley M. Jensen, *Registrar*

SUMMER SESSION AND EVENING COLLEGE

Paul N. Clem, *Director*

CONTENTS

CORRESPONDENCE DIRECTORY	ii
COLLEGE CALENDAR FOR 1973-74	v
GENERAL STATEMENT OF POLICY	COVER II
I. THE COLLEGE	
Objectives	1
History	2
Campus	3
Presidents and Chancellors	5
Board of Visitors	7
Directory of Administrative Officers	8
Faculty	11
Library and Health Service Staffs	32
II. STUDENT AFFAIRS	
Student Life	33
Student Personnel Services	41
Financial Assistance and Academic Scholarships for Students	44
III. ACADEMIC REGULATIONS AND REQUIREMENTS	
Admission to the College	46
Tuition and Expenses	50
Requirements for Degrees and Academic Regulations	54
IV. FIELDS OF CONCENTRATION AND COURSE DESCRIPTIONS	
The Faculty of Arts and Sciences	65
Graduate Program in Applied Science	168
The School of Business Administration	169
The School of Education	175
The Marshall-Wythe School of Law	182
The School of Marine Science	184
	iii

Special Programs of the College	186
Virginia Associated Research Campus	188
Pre-Professional Programs	189

V. ORGANIZATIONS OF THE COLLEGE

Institute of Early American History and Culture	192
The Marshall-Wythe Institute for Research in the Social Sciences	194
The Society of the Alumni	195
The Association of Parents	195

VI. MISCELLANEOUS INFORMATION

Enrollment 1972-73	196
Geographical Distribution of Students 1972-73	196
Index	198

COLLEGE CALENDAR 1973-74

1973

First Semester

September 1-4	Orientation Period (Saturday-Tuesday)
September 5	Freshman Registration (Wednesday)
September 5-6	Registration of all other Students, including Graduate Students (Wednesday-Thursday)
September 7	Beginning of Classes: 8 a.m. (Friday)
September 22	Last Day for Course or Section Changes: 5 p.m. (Saturday)
October 20	Homecoming (Saturday)
October 27	Mid-Semester Reports (100-200 Courses) filed with Registrar: 12 noon (Saturday)
November 21	Beginning of Thanksgiving Holiday: 1 p.m. (Wednesday)
November 26	End of Thanksgiving Holiday: 8 a.m. (Monday)
December 14	End of Classes: 5 p.m. (Friday)
December 14	Beginning of Christmas Recess: 5 p.m. (Friday)

1974

January 2	End of Christmas Recess: 8 a.m. (Wednesday)
January 2-3	Reading Period (Wednesday-Thursday)
January 4-16	Semester Examinations (Friday-Wednesday)

Second Semester

January 24-25	Registration of all Students (Thursday-Friday)
January 28	Beginning of Classes: 8 a.m. (Monday)
February 11	Last Day for Course or Section Changes: 5 p.m. (Monday)
February 9	Charter Day: 11 a.m. (Saturday)
March 16	Mid-Semester Reports (100-200 Courses) filed with Registrar: (12 noon-Saturday)
March 22	Beginning of Spring Recess: 5 p.m. (Friday)
April 2	End of Spring Recess: 8 a.m. (Tuesday)
April 19	Spring Convocation: 11 a.m. (Friday)
May 10	End of Classes: 5 p.m. (Friday)
May 12-15	Reading Period (Sunday-Wednesday)
May 16-28	Semester Examinations (Thursday-Tuesday)
June 2	Commencement Day (Sunday)

SUMMER SESSION

June 17	Beginning of Summer Session—First Term (Monday)
July 19	End of First Term (Friday)
July 22	Beginning of Second Term (Monday)
August 23	End of Second Term (Friday)
August 24	Summer Session Commencement (Saturday)

SEPTEMBER 1973							OCTOBER 1973							NOVEMBER 1973						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1		1	2	3	4	5	6					1	2	3
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	
30																				

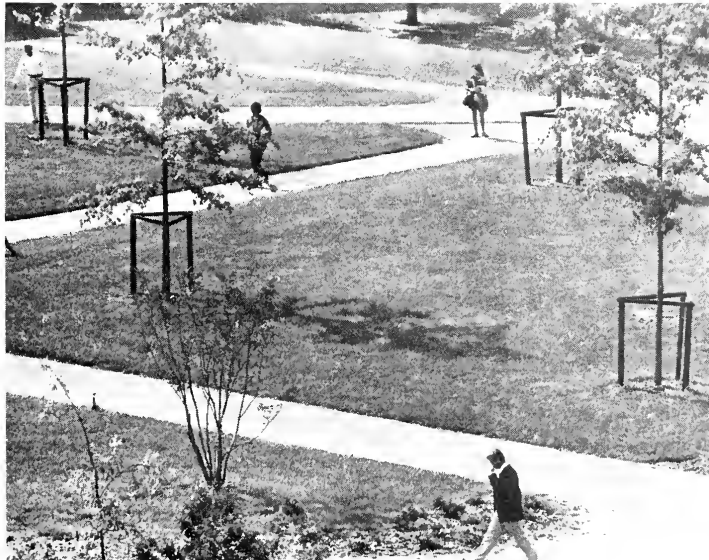
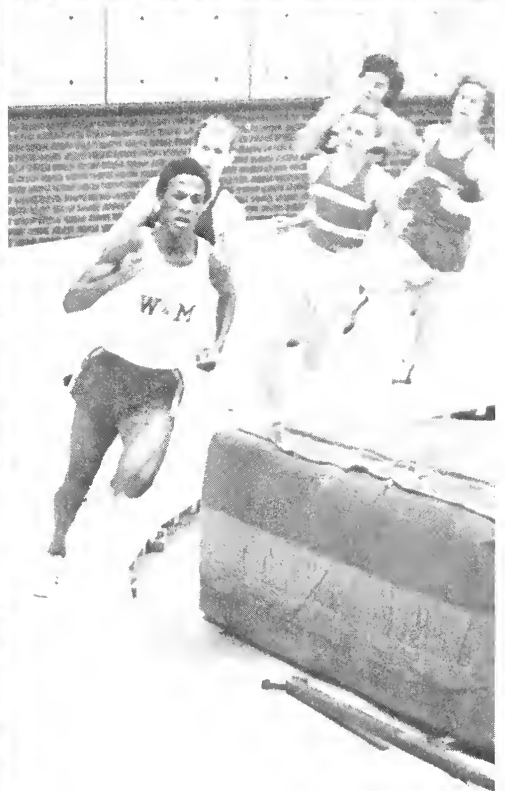
DECEMBER 1973							JANUARY 1974							FEBRUARY 1974						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1			1	2	3	4	5						1	2
2	3	4	5	6	7	8	6	7	8	9	10	11	12	3	4	5	6	7	8	9
9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31			24	25	26	27	28		
30	31																			

MARCH 1974							APRIL 1974							MAY 1974						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1			1	2	3	4	5					1	2	3
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31	
31																				

JUNE 1974							JULY 1974							AUGUST 1974						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1			1	2	3	4	5						1	2
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	31
30																				







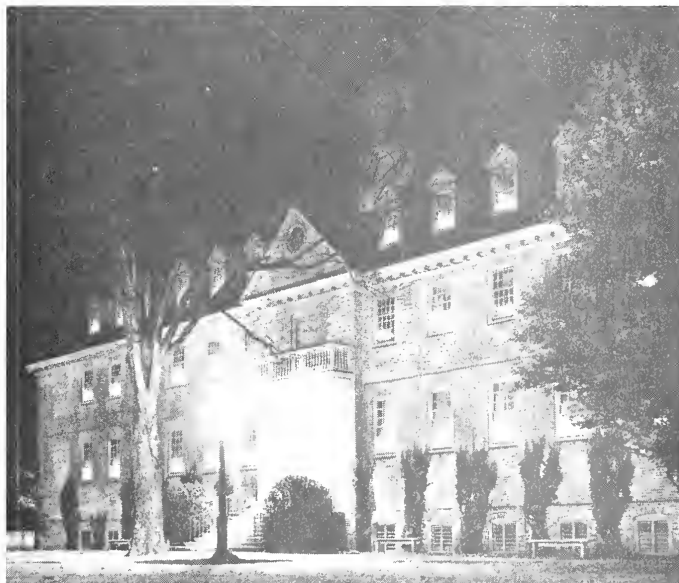




Top left—William and Mary Hall
Right—Water Follies in Adair Pool

Top right—View from the Wren Building
Lower left—Earl Gregg Swem Library

Center—Sir Christopher Wren Building from the Sunken Garden
Lower right—Front Area of Swem Library



Top—Crim Dell Center left—The Wren Building by night Center right—The President's House Lower left—Auditorium Lecture Hall
Lower right—Andrews Fine Arts Display Area

I. THE COLLEGE

OBJECTIVES

Founded in 1693 as the second institution of higher education in the country, the College of William and Mary in Virginia is today a small, residential, full-time, coeducational university. It is a state university, drawing seventy percent of its almost four thousand undergraduate students from the Commonwealth of Virginia. It is also national and international in character and contribution, enrolling students from throughout the nation, many foreign countries, and varied backgrounds.

William and Mary is primarily an undergraduate institution, providing a liberal education that is rounded and thorough, preparing its students to live and to make a living. All students gain a broad base of understanding and knowledge in arts and sciences in their freshman and sophomore years. In their junior and senior years, they may pursue work toward the bachelor of arts or bachelor of science degrees in a full range of concentrations in arts and sciences or education, or they may enter a program of study in the School of Business Administration leading to the Bachelor of Business Administration degree.

The College also provides opportunity for its students to pursue graduate work compatible with the liberal undergraduate program. Advanced studies are offered in several fields in the arts and sciences leading to the master of arts and master of science degrees, and in history and physics leading to the Ph.D. degree. In the professional schools, the Juris Doctor degree is offered by the Marshall-Wythe School of Law; the Master of Business Administration degree by the School of Business Administration; and the Master of Arts in Education degree, the Master of Education degree, the Certificate of Advanced Study and the Doctor of Education degree by the School of Education. The School of Marine Science offers programs leading to the Master of Arts and Ph.D. degrees.

The College's commitment in all programs to liberal education is the source of institutional coherence. William and Mary emphasizes, in its undergraduate, graduate and professional programs, the development of the student as a whole individual. The criterion of excellence in teaching and learning, in class and out of class, is at the heart of the educational process. With such objectives, and with a selective and limited enrollment, the College strives to provide its students with a quality education, and to make a significant contribution to the Commonwealth of Virginia and to the nation through the development of independent, responsive and responsible individuals. Faculty, students, and administrators work closely together to create this educational environment, under the leadership of the Board of Visitors and with the support of the Board of the Society of the Alumni.

Continuing exploration of and participation in innovative and experimental approaches to teaching and learning are a significant aspect of the College's forward movement, and emphasis on research and high quality graduate programs contributes strongly to the development of excellence at William and Mary.

The College offers a wide range of courses, seminars, and programs to adults, both for credit and non-credit, in the evening and during the day, at its Williamsburg campus, at the Virginia Associated Research Campus in Newport News and at its branch college, Christopher Newport College, also in Newport News, during the regular academic year and through the summer. This contribution to the educational enrichment of the citizens of Virginia throughout their careers is provided by the professional schools of education, business, and law, and by the faculty of arts and sciences. It is in keeping with the College's commitment, as a State institution, to community service and enhanced educational opportunities for the adult citizens of the State of Virginia, and for its more than 20,000 known alumni.

William and Mary is a college community, small enough to provide for relationships that allow true teaching and learning, large enough to have the resources to achieve excellence. An important aspect of this community is the location of the College in the beautiful and historic city of Williamsburg, where it constitutes an integral

OBJECTIVES

part of the restoration of Colonial Williamsburg. The partnership of the College, the City, and the Restoration, and the educational, cultural and recreational opportunities afforded to all students at the College by this partnership add to the quality of life and the quality of education at William and Mary.

HISTORY

The College of William and Mary was chartered in 1693 by King William III and Queen Mary II and stands today as the second oldest institution of higher learning in America. Only Harvard is older, and the antecedents of William and Mary pre-date that institution. In 1619, the colonists of Virginia attempted to erect a college at Henrico, Virginia, but it is reported that the Indian Massacre of 1622 cut that effort short.

The College of William and Mary has endured the ravages of two wars—the War of Independence and the War Between the States—and has played a substantial role in each. The Sir Christopher Wren Building, the oldest academic structure in America in continuous classroom use, was constructed in 1695. Partially destroyed by fire three times, occupied by invaders twice, it stands as a lasting hallmark to the enduring spirit of William and Mary.

In the Wren Building, several of America's greatest early leaders studied. Three American Presidents were students at William and Mary during its "Golden Era"—Thomas Jefferson, James Monroe and John Tyler. George Washington received his surveyor's license at William and Mary, returning after his Presidency to serve as its Chancellor. The roll call of patriots who studied at William and Mary is long and distinguished: 16 members of the Continental Congress, four signers of the Declaration of Independence, four justices of the Supreme Court of the United States, including John Marshall, more than 30 United States Senators, over 60 members of the House of Representatives, eight members of the Presidential Cabinets, eighteen ministers to foreign countries, 27 governors of 10 states, and many other notables.

Perhaps its most notable graduate, Jefferson, while serving as Governor of Virginia and a member of the Board of Visitors, effected widespread changes at the College in 1779. He added chairs of modern languages and of municipal and constitutional law—both firsts in America—as well as schools of anatomy and medicine, while abolishing the grammar and divinity schools. With Jefferson's reorganization, the College adopted America's first elective system of study and introduced the Honor System, still a trademark of the College today. In 1776, William and Mary had established Phi Beta Kappa, the nation's first intercollegiate fraternity. And in 1781 it became America's first true university, uniting the faculties of law, medicine, and the arts.

In the first half of the nineteenth century the College prospered, and during the period from 1836–46, it attained the highest enrollment in its history until 1889. Instruction at the College was suspended during the Civil War, and its buildings were occupied successively by both the Confederate and Union armies. In 1862, the Wren Building was partially burned by Union troops—the third such destruction by fire, the other burnings having occurred in 1705 and 1859. After the war the College resumed classes despite very few resources, but in 1881 it again suspended its operations for a seven-year period. Colonel Benjamin Ewell, the President during this period, kept the College Charter alive, however, by ringing the bell of the Wren Building to mark the opening of each term.

In 1888, William and Mary reopened when the Commonwealth of Virginia provided an annual grant of \$10,000, and thereafter the State increased its financial commitment to the College. Finally, in 1906, the Commonwealth purchased the College and placed it under the control of a Board of Visitors appointed by the Governor as part of the state system of higher education, the form of government under which the College still operates. In 1918 the College became coeducational, and in the 16-year-period that followed, its facilities were increased tenfold and its enrollment from 130 to 1300. From 1928 through 1932, the three original buildings of the College—the Wren,

HISTORY

the President's House and the Brafferton—were restored to their original appearance through the generosity of John D. Rockefeller, Jr.

In its 20th century evolution, William and Mary has expanded rapidly. During World War II, it provided facilities for two armed forces programs, and in 1943 it established in cooperation with Colonial Williamsburg the Institute of Early American History and Culture. In 1946 enrollment reached 2000 for the first time in William and Mary's history.

After the war, the College not only grew itself, but was responsible for the genesis of four branch colleges, three of which have become four-year institutions in urban areas of Virginia. For a brief period, William and Mary was known as The Colleges of William and Mary, with branches in Richmond and Norfolk, but that arrangement was dissolved in 1962. Thereafter, with the encouragement of the Commonwealth, the College launched a major building program and undertook efforts to strengthen its program in liberal arts and sciences, while developing advanced professional and graduate programs appropriate to its tradition and competence. That building program in all aspects of the College's development is still under way.

Based on its expanded mission, the College received recognition in 1967 as having attained university status in the modern sense. At the same time, the Board of Visitors stipulated that the institution should always retain its original name of the College of William and Mary in Virginia.

The modern College of William and Mary is an institution of 24 departments in its Faculty of Arts and Sciences, and schools of Business Administration, Education, Law, and Marine Science. It offers concentrations in 25 areas for the bachelor's degree, 17 for the master's, and four areas for the doctorate.

From a "hundred scholars more or less" envisioned in its Charter, William and Mary has grown to approximately 4000 full-time undergraduate students, and some 800 graduate students in law, business, education, and the arts and sciences. Despite its recent growth and development William and Mary's emphasis remains on individual relationships, the pre-eminence of teaching and learning, and the importance of the liberal education of the undergraduate student—the kind of relationship between student and teacher that Jefferson found in William Small, whom he credited with fixing "my destinies for life."

William and Mary's 24th President, Dr. Thomas A. Graves, Jr., who took office in September, 1971, defines William and Mary as "a college community, small enough to provide for a set of relationships that allow true teaching and learning to take place, large enough to have the resources to strive toward excellence." After nearly three centuries of existence, the College remains, as the President's statement suggests, a place of universal study dedicated to the concept of educating the whole individual, and to the excellence that men such as Jefferson were committed.

THE CAMPUS

A visitor to the Sir Christopher Wren Building at the west end of the Duke of Gloucester Street may occasionally believe that this ancient building—the oldest classroom building in continuous use in America—is the beginning and end of the College of William and Mary. Indeed it is the most famous building on the campus, first constructed in 1695, ravaged three times by fire, and flanked as it is on each side by the President's House and The Brafferton, which survived with the Wren Building through the Revolutionary and Civil wars. But the Wren Building marks only the eastern tip of a campus that includes 1200 acres, approximately 40 major buildings, a large lake, extensive woods and numerous playing fields.

At the rear of the Wren, where—according to legend—Thomas Jefferson once looked westward and ventured the hope that "the College should always look upon the country," there is a long stretch of green and wooded land known as the Jefferson Prospect. It begins with the Sunken Garden, with its wide expanse of lush green lawn

THE CAMPUS

crossed by old brick walks and surrounded by beautiful boxwood, extends to an area known as Crim Dell, with its oriental bridge crossing a lily pond which is nestled in a clump of miniature woods, and continues to lovely Lake Matoaka. Surrounding Lake Matoaka is the College Woods, an area still in its virgin state, which has trails for hiking and provides an exceptional natural laboratory for students at the College.

The Jefferson Prospect forms the heart of the modern campus. The College has been constructed in stages during the nearly three centuries of William and Mary's existence, and is effectively designated by periods—the Ancient Campus, consisting of the Wren Building, the President's House, and the Brafferton; the Modern Campus, much of which was constructed in the 1920's and 30's and which extends from the Wren Building on either side of the Sunken Garden, to Crim Dell and beyond to Cary Stadium; and the New Campus, which has been under construction since the late 50's, through the 1960's, and now into the 70's, and which extends from Crim Dell almost to Lake Matoaka between Jamestown and Richmond Roads.

For a campus that was constructed over a period of nearly 300 years, there is an unusual degree of aesthetic symmetry among the buildings of the three areas. In the construction of the New Campus, the College continued the Georgian architecture and used Flemish Bond brick—the same as on the Modern Campus—which, in time, develops a soft, mellow effect. Moreover, the buildings were and are being constructed on a scale that enables and typifies the personal approach to education that forms the heart of William and Mary's educational mission.

Classes still take place in all three areas of the William and Mary campus, not excluding the Sir Christopher Wren Building where men such as Jefferson, Monroe and Tyler once studied. On the New Campus, where several classroom buildings are concentrated, the students find easy access from Swem Library, which forms the heart of the academic mall, to the William Small Physics Building, to Hugh Jones Hall, to another recently completed social science building, to Robert Andrews Hall of Fine Arts and Phi Beta Kappa Hall, and to John Millington Hall of Life Sciences. A new chemistry building will complete the academic court, whose buildings fan out to create a feeling of openness when one views the area from its front—Jamestown Road.

In construction of its residence halls in recent years, the College has extended its concept of personalized education. Rejecting the traditional pattern of large dormitory designs with long halls, low ceilings and inadequate recreation facilities, the College has completed in the late 60's and early 70's two clusters of residence halls that are designed in individualized units that accommodate up to 42 students per unit.

The new concept has enabled the College to apply its goal of comprehensive education to the residence halls in such innovative educational programs as Project Plus, in which 84 students live and take their academic work together in the same building under the same faculty who teach in the residence itself. Other residence units serve as language houses, adding an extra dimension to the education of students studying foreign languages within a common environment.

Within the overall concept of comprehensive education, William and Mary Hall, a multi-purpose facility that can seat up to 11,000, provides unique accommodations for intercollegiate athletics, physical education, and cultural activity. With its potential for varied uses, William and Mary Hall may accommodate within the same week an indoor track meet, an intercollegiate basketball game, a debate between two leading thinkers of the country, a concert by a prominent artist, or a routine College event such as registration.

Amidst the bustling academic activity that occurs within the buildings, students and faculty can still walk across one of the loveliest campuses in the nation—adorned and scented by boxwood, dogwood, azaleas, lilacs, redbud trees, Japanese cherry, and cryptomeria. It is a campus well-suited to the Jeffersonian dream and at the same time responsive to today's educational needs and desires.

PRESIDENTS OF THE COLLEGE

JAMES BLAIR, 1693–1743

THOMAS RODERICK DEW, 1836–1846

WILLIAM DAWSON, 1743–1752

ROBERT SAUNDERS, 1847–1848

WILLIAM STITH, 1752–1755

BENJAMIN S. EWELL, 1848–1849

THOMAS DAWSON, 1755–1760

JOHN JOHNS, 1849–1854

WILLIAM YATES, 1761–1764

BENJAMIN S. EWELL, 1854–1888

JAMES HORROCKS, 1764–1771

LYON G. TYLER, 1888–1919

JOHN CAMM, 1771–1777

JULIAN A. C. CHANDLER, 1919–1934

JAMES MADISON, 1777–1812

JOHN STEWART BRYAN, 1934–1942

JOHN BRACKEN, 1812–1814

JOHN EDWIN POMFRET, 1942–1951

JOHN AUGUSTINE SMITH, 1814–1826

ALVIN DUKE CHANDLER, 1951–1960

WILLIAM H. WILMER, 1826–1827

DAVIS YOUNG PASCHALL, 1960–1971

ADAM EMPIE, 1827–1836

THOMAS ASHLEY GRAVES, JR., 1971–

CHANCELLORS OF THE COLLEGE

HENRY COMPTON, *Bishop of London, 1693–1700*

THOMAS TENISON, *Archbishop of Canterbury, 1700–1707*

HENRY COMPTON, *Bishop of London, 1707–1713*

JOHN ROBINSON, *Bishop of London, 1714–1721*

WILLIAM WAKE, *Archbishop of Canterbury, 1721–1729*

EDMUND GIBSON, *Bishop of London, 1729–1736*

WILLIAM WAKE, *Archbishop of Canterbury, 1736–1737*

EDMUND GIBSON, *Bishop of London, 1737–1748*

THOMAS SHERLOCK, *Bishop of London, 1749–1761*

THOMAS HAYTER, *Bishop of London, 1762*

CHARLES WYNDHAM, *Earl of Egremont, 1762–1763*

PHILIP YORKE, *Earl of Hardwicke, 1764*

RICHARD TERRICK, *Bishop of London, 1764–1776*

GEORGE WASHINGTON, *First President of the United States, 1788–1799*

JOHN TYLER, *Tenth President of the United States, 1859–1862*

HUGH BLAIR GRIGSBY, *Historian, 1871–1881*

JOHN STEWART BRYAN, *Twentieth President of the College of William and Mary,
1942–1944*

COLGATE W. DARDEN, JR., *Governor of Virginia, 1946–1947*

ALVIN DUKE CHANDLER, *Twenty-second President of the College
of William and Mary,
1962–*

BOARD OF VISITORS

R. HARVEY CHAPPELL, JR.
BLAKE T. NEWTON, JR.
WILLITS H. BOWDITCH

RECTOR
VICE RECTOR
SECRETARY

Term expires March 6, 1974

GARRETT DALTON
FREDERICK DEANE, JR.
MRS. R. V. H. DUNCAN
MRS. GEORGE FALCK
ROGER H. HULL
JOHN R. L. JOHNSON, JR.
BLAKE T. NEWTON, JR.
GEORGE D. SANDS
HARRY L. SNYDER
J. E. ZOLLINGER

RADFORD, VIRGINIA
RICHMOND, VIRGINIA
ALEXANDRIA, VIRGINIA
MCLEAN, VIRGINIA
CHARLOTTESVILLE, VIRGINIA
CHADDS FORD, PENNSYLVANIA
NEW YORK, NEW YORK
WILLIAMSBURG, VIRGINIA
VIRGINIA BEACH, VIRGINIA
FORT LAUDERDALE, FLORIDA

Term expires March 6, 1976

WILLITS H. BOWDITCH
R. HARVEY CHAPPELL, JR.
ROBERT J. FAULCONER
WILLIAM S. HUBARD
JAMES E. KILBOURNE
MRS. VICTOR POWELL
WILLIAM H. TRAPNELL

YORKTOWN, VIRGINIA
RICHMOND, VIRGINIA
NORFOLK, VIRGINIA
ROANOKE, VIRGINIA
PETERSBURG, VIRGINIA
ANNANDALE, VIRGINIA
RICHMOND, VIRGINIA

Standing Committees of the Board of Visitors

EXECUTIVE COMMITTEE: R. Harvey Chappell, Jr., Chairman; Willits H. Bowditch; Frederick Deane, Jr.; Mrs. R. V. H. Duncan; Blake T. Newton, Jr.; George Sands; Executive Vice President, ex officio.

FINANCE COMMITTEE: Frederick Deane, Jr., Chairman; Willits H. Bowditch; John R. L. Johnson, Jr.; Blake T. Newton, Jr.; William H. Trapnell; Vice President for Business Affairs, ex officio.

BUILDINGS AND GROUNDS COMMITTEE: Mrs. George Falck, Chairman; Robert J. Faulconer; Roger Hull; George Sands; Harry L. Snyder; Vice President for Business Affairs, ex officio.

ACADEMIC AFFAIRS COMMITTEE: George Sands, Chairman; Mrs. R. V. H. Duncan; Mrs. George Falck; Robert J. Faulconer; James E. Kilbourne; Vice President for Academic Affairs, ex officio.

HONORARY DEGREES COMMITTEE: R. Harvey Chappell, Jr., Chairman; Garrett Dalton; William Hubard; John R. L. Johnson, Jr.; Blake T. Newton, Jr.; Mrs. Victor Powell; J. E. Zollinger; Vice President for Academic Affairs, ex officio.

DEVELOPMENT COMMITTEE: John R. L. Johnson, Jr., Chairman; Garrett Dalton; James E. Kilbourne; Harry L. Snyder; William H. Trapnell; J. E. Zollinger; Vice President for College Development, ex officio.

STUDENT AFFAIRS COMMITTEE: Roger Hull, Chairman; Willits H. Bowditch; Frederick Deane, Jr.; William Hubard; Mrs. Victor Powell; Vice President for Student Affairs, ex officio.

DIRECTORY OF ADMINISTRATIVE OFFICES ¹

Office of the President

Thomas A. Graves, Jr.	<i>President</i>
James S. Kelly	<i>Assistant to the President</i>
Jerry Van Voorhis	<i>Assistant to the President</i>
Jane H. Latham	<i>Recording Secretary, Board of Visitors</i>
Diana C. Love	<i>Secretary</i>

Office of the Executive Vice President

Carter O. Lowance	<i>Executive Vice President</i>
Ross L. Weeks, Jr.	<i>Assistant to the Executive Vice President</i>
Nell R. Jones	<i>Administrative Assistant to the Executive Vice President</i>

Office of the Vice President for Academic Affairs

George R. Healy	<i>Vice President for Academic Affairs</i>
James C. Livingston	<i>Dean of the Undergraduate Program</i>
Henry Aceto, Jr.	<i>Director, Virginia Associated Research Campus</i>
Carson H. Barnes, Jr.	<i>Director, Office of Special Programs</i>
Paul N. Clem	<i>Director, Summer Session and Evening College</i>
William C. Pollard	<i>Librarian</i>
Raymond W. Southworth	<i>Director, Computer Center</i>
Dudley M. Jensen	<i>Registrar</i>
Elizabeth R. Stearns	<i>Assistant Registrar</i>
Dorothy Bryant	<i>Assistant Registrar</i>

Office of the Vice President for Business Affairs

William J. Carter	<i>Vice President for Business Affairs</i>
Dennis K. Cogle	<i>Assistant to the Vice President for Business Affairs</i>
Irving H. Robitshek	<i>Personnel Supervisor and Equal Employment Opportunities Officer</i>
Floyd E. Whitaker	<i>Treasurer-Auditor</i>
Raymond A. Adams	<i>Assistant Treasurer-Auditor</i>
Willard C. Sterling, Jr.	<i>Internal Auditor</i>
William A. Snyder	<i>Supervisor of College Accounts</i>
Evelyn P. Kidd	<i>Supervisor of Student Accounts</i>
Gladys A. Campbell	<i>Supervisor of Student Loan Accounts</i>
Martha M. Muntean	<i>Supervisor of College Payroll Office</i>
Ervin D. Farmer	<i>Supervisor of Buildings and Grounds</i>
William T. Allen	<i>Director of Purchases and Stores</i>
Bruce W. Locke	<i>Manager, College Bookstore</i>

Office of the Vice President for College Development

P. Warren Heemann	<i>Vice President for College Development</i>
Stanley E. Brown	<i>Director for Corporate Relations and Placement</i>
Samuel Buckwalter, III	<i>Director for Grants and Research Contracts</i>
Leonard A. Meyer	<i>Director for Annual Giving</i>

¹ Directory accurate as of June 1, 1973

DIRECTORY OF ADMINISTRATIVE OFFICES

Robert T. Petty
Stella D. Neiman
Andrew D. Parker, Jr.

Assistant Director for Annual Giving
Director for Sponsored Programs
Director for Special Gifts

Office of the Dean of the Undergraduate Program

James C. Livingston
W. Samuel Sadler
Lynn S. Schulz
Morris G. Wray
Carolyn L. Moseley
Frank L. Field
Warren J. Green
Kenneth E. Smith, Jr.

Dean of the Undergraduate Program
Dean of Students
Associate Dean for Student Development
Associate Dean for Residence Hall Life
Associate Dean for Administration
Associate Dean for Career Planning
Director of the Campus Center
Associate Director of the Campus Center and Director
of Student Activities
Director of the Psychological Counseling Center
Director of Student Aid
Director of Veteran Affairs

Jay Lee Chambers
E. Leon Looney
John C. Bright

Office of Admissions

Robert P. Hunt
Rex Tillotson
Harriett E. Reid
Juanita W. Wallace

Dean of Admissions
Associate Dean of Admissions
Associate Dean of Admissions
Assistant Dean of Admissions

Earl Gregg Swem Library

William C. Pollard
Alva W. Stewart

Librarian
Associate Librarian

Office of Information Services

Ross L. Weeks, Jr.
Barbara S. Ball
S. Dean Olson
Eleanor R. Anderson
James N. Chalkley

Director, Information Services
Director, News Office
Director of Publications
Information Officer
Supervisor, Printing Office

Office of Institutional Research

Donald J. Herrmann
Jean C. Keating

Director, Institutional Research
Assistant Director, Institutional Research

Space Radiation Effects Laboratory

Robert T. Siegel

Director of SREL

Student Health Services

Dr. Richard D. Cilley
Dr. Franklin A. Munsey
Bettye Bracey, R.N.

Director, Student Health Services
Assistant Director, Student Health Services
Head Nurse

DIRECTORY OF ADMINISTRATIVE OFFICES

Department of Athletics

Ben L. Carnevale	<i>Director of Athletics</i>
Edmund T. Derringe	<i>Business Manager</i>
Barry G. Fratkan	<i>Sports Information Director and Executive</i>
	<i>Director of Educational Foundation</i>
Robert A. Sheeran	<i>Assistant Sports Information Director</i>

William and Mary Hall

H. Lester Hooker, Jr.	<i>Director of William and Mary Hall</i>
Bettie S. Adams	<i>Assistant Director of William and Mary Hall</i>

Alumni Affairs

Gordon C. Vliet	<i>Executive Secretary of Society of the Alumni</i>
-----------------	---

Faculty of Arts and Sciences

Harold L. Fowler	<i>Dean</i>
Robert A. Johnston	<i>Associate Dean</i>
John E. Selby	<i>Graduate Dean</i>

Marshall-Wythe School of Law

James P. Whyte	<i>Dean</i>
Richard A. Williamson	<i>Associate Dean for Admissions</i>
Timothy J. Sullivan	<i>Associate Dean for Administration</i>
J. Madison Whitehead	<i>Law Librarian</i>

School of Business Administration

Charles L. Quittmeyer	<i>Dean</i>
Marvin M. Stanley	<i>Associate Dean for Graduate Studies</i>
James E. Smith	<i>Associate Dean for Undergraduate Studies</i>

School of Education

Richard B. Brooks	<i>Dean</i>
Robert C. Jones	<i>Associate Dean</i>

School of Marine Science

William J. Hargis, Jr.	<i>Dean</i>
John L. Wood	<i>Assistant Director</i>
W. J. Davis	<i>Assistant Director</i>
John M. Zeigler	<i>Assistant Director</i>
Roy J. Washer	<i>Assistant Administrative Director</i>

FACULTY ¹

THOMAS A. GRAVES, JR., *President of the College*. B.A. Yale University; M.B.A. and D.B.A., Harvard University.

CARTER O. LOWANCE, *Executive Vice President*. A.B. Roanoke College.

GEORGE R. HEALY, *Vice President for Academic Affairs*. B.A., Oberlin College; M.A. and Ph.D., University of Minnesota.

THOMAS CONNER ATKESON (1954, 1954), *Chancellor Professor of Taxation, Emeritus*. B.S., M.S. and Ph.D., Georgetown University.

MARTHA ELIZABETH BARKSDALE (1936, 1921), *Associate Professor of Physical Education for Women, Emeritus*. O.D., Gymnastic Peoples College, Ollerup, Denmark; A.B. and M.A., College of William and Mary.

EMILY ELEANOR CALKINS (1953, 1927), *Associate Professor of Mathematics, Emeritus*. A.B., College of William and Mary; M.A., University of Michigan.

LESTER J. CAPPON (1946, 1946), *Lecturer in History, Emeritus*. A.B. and M.A., University of Wisconsin; M.A. and Ph.D., Harvard University.

JAMES DAVID CARTER, JR. (1930, 1927), *Associate Professor of Modern Languages, Emeritus*. A.B., College of William and Mary; Docteur de l'Université de Toulouse.

HIBBERT DELL COREY (1943, 1929), *Professor of Business Administration, Emeritus*. A.B., University of Michigan; M.A., Ohio State University.

GEORGE W. CRAWFORD (1972, 1960), *Professor of Physics, Emeritus*. B.S., Davidson College; M.S., University of North Carolina; Ph.D., Ohio State University.

BIRDENA E. DONALDSON (1956, 1956), *Dean of Women, Emeritus*. A.B., Franklin College; M.A., Northwestern University; Ed.D., Columbia University.

WAYNE FULTON GIBBS (1931, 1926), *Professor of Accountancy, Emeritus*. B.S. and M.S., University of Illinois; C.P.A.

W. MELVILLE JONES (1953, 1928), *Chancellor Professor of English, Emeritus*. A.B., Allegheny College; M.A., Ohio State University; Ph.D., Harvard University.

J. WILFRED LAMBERT (1959, 1931), *Professor of Psychology, Emeritus*. A.B., College of William and Mary.

LAWRENCE C. LEONARD (1957, 1955), *Lecturer in Mathematics, Emeritus*. B.S., U.S. Military Academy.

JOHN H. LONG (1968, 1955), *Associate Professor of Physics, Emeritus*. B.S., U.S. Naval Academy; M.S., Harvard University.

JEAN STEWART MAJOR (1928, 1928), *Associate Professor of Home Economics, Emeritus*. B.S. and M.A., Columbia University.

CHARLES F. MARSH (1968, 1930, 1968), *Lecturer in Business Administration, Emeritus*. A.B., Lawrence College; M.A. and Ph.D., University of Illinois.

CARL W. MCCARTHA (1965, 1955), *Professor of Education, Emeritus*. A.B., Newberry College; M.A., University of North Carolina; Ed.D., University of Florida.

BEN CLYDE MCCARY (1968, 1930), *Professor of Modern Languages, Emeritus*. A.B., University of Richmond; Docteur de l'Université de Toulouse.

RICHARD LEE MORTON (1921, 1919), *Chancellor Professor of History, Emeritus*. A.B., Hampden-Sydney College; M.A., University of Virginia and Harvard University; Ph.D., University of Virginia; Litt.D., Hampden-Sydney College; LL.D., College of William and Mary.

WILLIAM WARNER MOSS, JR. (1937, 1937), *John Marshall Professor of Government and Citizenship, Emeritus*. A.B., University of Richmond; M.A. and Ph.D., Columbia University.

¹ The first date indicates the year when the present rank was attained; the second date the year when the individual was first appointed to the instructional staff. A third date indicates the year of reappointment. This list is a record of all faculty of the College for the academic years 1972-73, and an announcement of faculty for 1973-74.

FACULTY

- DAVIS Y. PASCHALL (1960, 1960), *President of the College, Emeritus*. A.B., M.A., College of William and Mary; Ed.D., University of Virginia.
- MARCEL REBOUSSIN (1962, 1946), *Professor of Modern Languages, Emeritus*. Professorat de français, Ecole Normale Supérieure de St. Cloud; M.A., Columbia University; Agrégé des lettres, Sorbonne, Paris.
- MARION DALE REEDER (1967, 1943), *Professor of Physical Education for Women, Emeritus*. B.S. and M.S., University of Illinois.
- GORDON B. RINGGOLD (1963, 1946), *Professor of Modern Languages, Emeritus*. A.B., Denison University; M.A., Middlebury College; Ph.D., Georgetown University.
- GRACE M. SMITH (1966, 1966), *Associate Professor of Education, Emeritus*. A.B. and M.Ed., University of Virginia.
- ALBION GUILFORD TAYLOR (1928, 1927), *Chancellor Professor of Political Economy, Emeritus*. A.B., Des Moines University; M.A., University of Nebraska; Ph.D., University of Illinois.
- ALMA L. WILKIN (1957, 1928), *Associate Professor of Home Economics, Emeritus*. B.S., Kansas State University; M.A., Teachers College, Columbia University.
- MARGARET WINDER (1959, 1948, 1959), *Assistant Professor of Education, Emeritus*. B.S., Madison College; M.A., College of William and Mary.
- JOHN C. ABBOTT (1971, 1971), *Assistant Professor of Education*. B.A., University of Maine; M.Ed. and Ph.D., Pennsylvania State University.¹
- HENRY ACETO, JR. (1970, 1970), *Associate Professor of Biology*. B.S., State University of New York, Albany; M.S., University of California, Berkeley; Ph.D., University of Texas.
- FRED L. ADAIR (1971, 1971), *Associate Professor of Education*. B.S., University of North Carolina; M.A.T., Duke University; Ph.D., University of North Carolina.
- JOSEPH S. AGEE (1969, 1958), *Associate Professor of Physical Education for Men*. B.S. and M.Ed., College of William and Mary.
- ALAN F. ALBERT (1971, 1971), *Instructor in Physical Education for Men*. A.B. and M.Ed., College of William and Mary.
- NATHAN ALTSHULER (1967, 1960), *Professor of Anthropology*. A.B., University of Michigan; Ph.D., Harvard University.
- CARL M. ANDERSEN (1972, 1967), *Senior Research Associate in Mathematics*. B.S. and M.S., University of Michigan; Ph.D., University of Pennsylvania.
- CHARLES HARPER ANDERSON (1957, 1946), *Lecturer in Law*. A.B. and B.C.L., College of William and Mary; LL.M., University of Virginia.
- JAY D. ANDREWS (1959, 1946), *Professor of Marine Science*. B.S., Kansas State College; M.S. and Ph.D., University of Wisconsin.
- DEE G. APPELY (1972, 1972), *Lecturer in Psychology*. A.B., University of Denver; Ph.D., University of Michigan.²
- M. JOY ARCHER (1972, 1968), *Associate Professor of Physical Education for Women*. B.S., Skidmore College.
- ALFRED R. ARMSTRONG (1961, 1933), *Professor of Chemistry*. B.S., and M.A., College of William and Mary; Ph.D., University of Virginia.
- EDWARD J. ASHNAULT (1972, 1972), *Instructor in Physical Education for Men*. B.S., Plymouth State College; M.A., Fairfield University.
- ELISABETH E. BACKHAUS (1967, 1966), *Assistant Professor of Modern Languages*. A.B., M.A. and Ph.D., University of Connecticut.
- CHARLES F. BAES, JR. (1972, 1972), *Visiting Research Professor of Chemistry*. B.S., Rutgers University; Ph.D., University of Southern California.²

¹ 1972-73

² 1972-73 only

FACULTY

- SAMUEL H. BAKER, III (1973, 1969), *Associate Professor of Economics*. B.S., Hampden-Sydney College; Ph.D., University of Virginia.
- GEORGE BALANIS (1971, 1971), *Lecturer in Physical Education for Men*. B.A., University of Texas.
- JOHN T. BALDWIN, JR. (1946, 1937, 1946), *Professor of Biology*. A.B., College of William and Mary; Ph.D., University of Virginia.
- DONALD L. BALL (1969, 1960), *Associate Professor of English*. A.B., University of Richmond; M.A., University of Delaware; Ph.D., University of North Carolina, Chapel Hill.
- CAROL E. BALLINGALL (1970, 1965), *Associate Professor of Anthropology*. A.B., Wayne State University; M.A., University of Chicago.
- WILLIAM J. BANGS, II (1971, 1971), *Assistant Professor of Mathematics*. B.A., M.S., M.Phil. and Ph.D., Yale University.¹
- J. WORTH BANNER (1965, 1949, 1964), *Professor of Modern Languages*. B.S., Roanoke College; M.A. and Ph.D., University of North Carolina.
- NORMAN F. BARKA (1970, 1965), *Associate Professor of Anthropology*. A.B., Beloit College; M.A. and Ph.D., Harvard University.
- JAMES R. BARON (1971, 1971), *Assistant Professor of Classical Studies*. A.B., Catholic University; M.A. and Ph.D., University of Minnesota.
- ROBERT A. BARRY (1972, 1964), *Associate Professor of Economics*. A.B., Stanford University; Ph.D., Yale University.
- JOANNE M. BASSO (1967, 1967), *Instructor in Modern Languages*. A.B., Connecticut College for Women; M.A., Middlebury College.
- N. STEPHEN BAUER (1972, 1969), *Assistant Professor of English*. A.B., Hamilton College; M.A. and Ph.D., Columbia University.
- EDWIN C. BAXLEY, JR. (1968, 1968), *Assistant Professor of Business Administration*. B.B.A., Baylor University; M.B.A., Louisiana State University.
- DONALD J. BAXTER (1973, 1967), *Associate Professor of Government*. A.B., Sacramento State College; M.A. and Ph.D., Syracuse University.
- RUTH A. BECK (1973, 1969), *Assistant Professor of Biology*. A.B., Radford College; M.Ed., University of Virginia.
- LAWRENCE S. BECKHOUSE (1968, 1968), *Assistant Professor of Sociology*. A.B., Knox College; M.A. and Ph.D., Vanderbilt University.
- MICHAEL E. BENDER (1970, 1970), *Associate Professor of Marine Science*. B.A., Southern Illinois University; M.S., Michigan State University; Ph.D., Rutgers University.
- JAMES B. BERRYHILL (1971, 1971), *Instructor in Physical Education for Men*. B.S., Old Dominion College; M.Ed., Western Maryland College.
- RICHARD W. BESNIER (1967, 1967), *Instructor in Physical Education for Men*. B.S., University of Maryland; M.Ed., College of William and Mary.
- R. CARLYLE BEYER (1965, 1965), *Professor of History*. A.B., Hamline University; A.B. and M.A., Oxford University; Ph.D., University of Minnesota.
- KENNETH F. BICK (1966, 1961), *Professor of Geology*. B.S., M.S. and Ph.D., Yale University.
- ROBERT E. L. BLACK (1965, 1959), *Professor of Biology and Marine Science*. A.B., William Jewell College; Ph.D., University of Washington.
- JERRY H. BLEDSOE (1971, 1971), *Associate Professor of Theatre and Speech*. A.B., University of Colorado; M.A., University of California, Los Angeles; Ph.D., Purdue University.
- RICHARD M. BLOCH (1972, 1972), *Lecturer in Psychology*. B.S., University of Pittsburgh; M.A. and Ph.D., University of Wisconsin.

¹ 1972-73

FACULTY

- RICHARD M. BLOOD (1972, 1972), *Assistant Professor of Business Administration*. B.S., Ursinus College; M.A., Temple University.
- HOWARD W. BLOOMBERG (1968, 1968), *Assistant Professor of Physics*. B.S., California Institute of Technology; M.S. and Ph.D., Northwestern University.
- F. ROBERT BOHL, JR. (1972, 1972), *Assistant Professor of Philosophy*. A.B., Rutgers University; M.A. and Ph.D., Brown University.
- BEVERLY B. BOTTEN (1972, 1972), *Lecturer in Music*. B.M., Southern Missionary College; M.M., Peabody Conservatory of Music.
- ANDRE J. BOURDE (1972, 1972), *James Pinckney Harrison Professor of History*. M.A., University of Aix; Ph.D., Cambridge University; D. Litt., University of Paris.¹
- ERIC L. BRADLEY (1971, 1971), *Assistant Professor of Biology*. A.B., San Fernando Valley State College; Ph.D., University of California, Santa Barbara.
- JANET S. BRADLEY (1973, 1973), *Lecturer in Biology*. A.B. and M.A., University of California, Santa Barbara.²
- ROY E. BRINKLEY (1971, 1971), *Assistant Professor of Education*. B.A., Randolph-Macon College; B.D., Union Theological Seminary; Ed.M., Temple University.
- BRIAN BROMBERGER (1971, 1971), *Assistant Professor of Law*. B.A., Scotch College, Melbourne; LL.B., Melbourne University; LL.M., University of Pennsylvania.³
- GARNETT R. BROOKS, JR. (1973, 1962), *Professor of Biology*. B.S. and M.S., University of Richmond; Ph.D., University of Florida.
- RICHARD B. BROOKS (1967, 1947, 1967), *Professor of Education*. B.P.E., Springfield College (Massachusetts); M.A., University of Pennsylvania; Ed.D., University of Virginia.
- ELIZABETH J. BROWN (1972, 1972), *Associate Professor of Physical Education for Women*. B.S., University of North Carolina, Greensboro; M.S., Florida State University.
- JUDY BROWN (1971, 1971), *Lecturer in Education*. A.B., Emory and Henry College; M.Ed., College of William and Mary.³
- MARION M. BROWN (1969, 1966), *Assistant Professor of Theatre and Speech*. A.B. and M.A., University of California at Los Angeles.
- RICHARD MAXWELL BROWN (1967, 1967), *Professor of History*. A.B., Reed College; A.M. and Ph.D., Harvard University.
- RONALD C. BROWN (1972, 1970), *Associate Professor of Law*. B.S., University of Toledo; J.D., University of Toledo Law School; LL.M., University of Michigan Law School.
- STEPHEN B. BRUSH (1973, 1973), *Assistant Professor of Anthropology*. A.B., University of California, Berkeley; M.A., University of Wisconsin, Madison.
- G. WILLIAM BULLOCK, JR. (1967, 1967), *Associate Professor of Education*. A.B., Lynchburg College; M.Ed. and Ed.D., University of Virginia.
- WILLIAM L. BYNUM (1971, 1969), *Associate Professor of Mathematics*. B.S., Texas Technological College; M.A. and Ph.D., University of North Carolina, Chapel Hill.
- MITCHELL A. BYRD (1963, 1956), *Professor of Biology*. B.S., M.S. and Ph.D., Virginia Polytechnic Institute.
- ROBERT J. BYRNE (1969, 1969), *Associate Professor of Marine Science*. M.S., University of Chicago; Ph.D., University of Chicago.
- DALE RALPH CALDER (1969, 1969), *Assistant Professor of Marine Science*. B.S., Acadia University; M.A. and Ph.D., College of William and Mary.
- CRAIG N. CANNING (1973, 1973), *Assistant Professor of History*. A.B., University of Utah; M.A., Stanford University.

¹ First semester, 1972-73

² Second semester, 1972-73

³ 1972-73

FACULTY

- MIRIAM CARDI (1972, 1972), *Acting Assistant Professor of Psychology*. B.S., M.A. and Ph.D., Ohio State University.¹
- CARL E. CARLSON (1972, 1972), *Assistant Professor of Physics*. A.B. and Ph.D., Columbia University.
- BERNARD L. CARNEVALE (1972, 1972), *Professor of Physical Education for Men*. B.S., New York University; M.S., University of North Carolina, Chapel Hill.
- JANE CARSON (1963, 1963), *Lecturer in History*. A.B., Flora Macdonald College; M.A. and Ph.D., University of Virginia.
- MICHAEL CASTAGNA (1973, 1973), *Assistant Professor of Marine Science*. B.S. and M.S., Florida State University.
- BENJAMIN RALPH CATO, JR. (1972, 1955), *Professor of Mathematics*. A.B. and M.A., Duke University.
- LOUIS E. CATRON (1969, 1966), *Associate Professor of Theatre and Speech*. A.B., Millikin University; M.A. and Ph.D., Southern Illinois University.
- JAY LEE CHAMBERS (1972, 1970), *Professor of Psychology*. A.B., George Washington University; M.A. and Ph.D., University of Kentucky.
- ROY L. CHAMPION (1971, 1967), *Associate Professor of Physics*. B.S. and M.S., North Carolina State University at Raleigh; Ph.D., University of Florida.
- MILES L. CHAPPELL (1971, 1971), *Assistant Professor of Fine Arts*. B.S., College of William and Mary; Ph.D., University of North Carolina, Chapel Hill.
- ROYCE W. CHESSER (1971, 1962), *Professor of Education*. A.B., Wake Forest University; M.Ed., College of William and Mary.
- THOMAS W. CHRIST (1971, 1971), *Assistant Professor of Sociology*. A.B., College of William and Mary; M.S. Ph.D., Cornell University.
- GERALD L. CLAYTON (1973, 1973), *Acting Assistant Professor of Government*. A.B., University of Florida; M.A., University of California, Berkeley.²
- PAUL P. CLOUTIER (1972, 1972), *Assistant Professor of Modern Languages*. A.B., University of Massachusetts; M.A. and Ph.D., University of Wisconsin.
- PAUL N. CLEM (1968, 1959), *Professor of Education*. A.B., Bridgewater College; M.A. and Ed. D., Michigan State University.
- STEPHEN C. CLEMENT (1969, 1964), *Associate Professor of Geology*. A.B., Cornell University; M.S., University of Utah; Ph.D., Cornell University.
- WILLIAM S. COBB, JR. (1969, 1967), *Associate Professor of Philosophy*. A.B., Wake Forest University; B.D., Union Theological Seminary, New York; Ph.D., Vanderbilt University.³
- JAMES W. COKE (1964, 1957), *Associate Professor of Modern Languages*. A.B., Western Kentucky University; M.A. and Ph.D., Indiana University.
- GEORGE D. COLE, JR. (1972, 1968), *Associate Professor of Business Administration*. A.B., Duke University; B.D., Yale University; Ed.D., Columbia University.
- HENRY E. COLEMAN (1972, 1964), *Associate Professor of Fine Arts*. A.B., College of William and Mary; M.A., State University of Iowa.
- RANDOLPH A. COLEMAN (1970, 1970), *Assistant Professor of Chemistry*. A.B., Susquehanna University; Ph.D., Purdue University.
- TOM A. COLLINS (1972, 1970), *Associate Professor of Law*. A.B., Indiana University; J.D., Indiana University-Indianapolis Law School; LL.M., University of Michigan Law School.
- JOHN W. CONLEE (1972, 1968), *Associate Professor of English*. A.B., University of Southern California; M.A. and Ph.D., University of Illinois.

¹ 1972-73

² 1973-74

³ On leave of absence second semester 1973-74

FACULTY

- LUTHER THOMAS CONNER, JR. (1964, 1964), *Assistant Professor of Mathematics*. B.S., Virginia Polytechnic Institute; M.A., University of North Carolina, Chapel Hill.
- GILBERT L. COOKE (1971, 1971), *Instructor in Modern Languages*. A.B., College of William and Mary.¹
- JAMES A. CORNETTE, JR., (1970, 1970), *Instructor in English*. A.B., College of William and Mary; M.A., Duke University.²
- BRADNER W. COURSEN (1969, 1968), *Professor of Biology*. A.B., Drew University; M.S. and Ph.D., University of Maryland.
- TAYLOR K. COUSINS (1968, 1968), *Assistant Professor of Economics*. B.S., University of Richmond.²
- JAMES D. COWLES (1973, 1968), *Associate Professor of Education*. B.S., University of Alabama; M.Ed., Rutgers University; Ph.D., University of Alabama.
- GOLIN R. COX (1972, 1972), *Research Associate in Physics*. A.B. and Ph.D., Oxford University.³
- R. MERRITT COX (1972, 1972), *Associate Professor of Modern Languages*. A.B., University of Richmond; M.A. and Ph.D., University of Wisconsin.
- M. BOYD COYNER, JR., (1972, 1969), *Professor of History*. A.B., M.A., and Ph.D., University of Virginia.
- ROBERT D. CRANE (1969, 1969), *Assistant Professor of Fine Arts*. A.B., University of Oklahoma; M.A. and M.F.A., University of Iowa.
- EDWARD P. CRAPOL (1971, 1967), *Associate Professor of History*. B.S., State University of New York at Buffalo; M.S. and Ph.D., University of Wisconsin.
- PATRICIA B. CROWE (1971, 1965), *Associate Professor of Physical Education for Women*. B.S., Sargent College, Boston University; M.S., University of North Carolina, Greensboro.
- FREDERIC R. CROWNFIELD, JR., (1968, 1956), *Professor of Physics*. A.B., Harvard College; M.S. and Ph.D., Lehigh University.
- CHARLES T. CULLEN (1971, 1971), *Lecturer in History*. A.B., University of the South; M.S., Florida State University; Ph.D., University of Virginia.
- JEROME J. CURTIS, JR. (1971, 1971), *Assistant Professor of Law*. B.A., and J.D., University of California, Hastings; LL.M., University of Virginia Law School.²
- WAGIH G. DAFASHY (1969, 1965), *Associate Professor of Business Administration*. B.Com., Ein Shams University, Cairo; M.B.A., University of Texas; Ph.D., University of Arkansas.
- RICHARD E. DAMON (1971, 1971), *Assistant Professor of Government*. A.B., Swarthmore College; Ph.D., Columbia University.⁴
- JAMES S. DARLING (1961, 1961), *Lecturer in Music*. A.B., Yale University; B.M., Yale University School of Music; M.M., University of Michigan.
- CHARLES EDWARD DAVIDSON (1964, 1949), *Professor of English*. A.B., Princeton University; M.A. and Ph.D., Yale University.
- WILLIAM F. DAVIS, JR. (1968, 1960), *Associate Professor of English*. A.B., Princeton University; M.A. and Ph.D., Yale University.
- WILLIAM JACKSON DAVIS (1963, 1963), *Associate Professor of Marine Science*. B.S., Virginia Polytechnic Institute; Ph.D., University of Kansas.
- CARL P. DAW JR., (1970, 1970), *Assistant Professor of English*. A.B., Rice University; M.A. and Ph.D., University of Virginia.⁵
- HUBERT A. DAW (1961, 1961), *Assistant Instructor in Psychology*. Associate Electronic Engineer, College of William and Mary (Norfolk).

¹ On leave of absence 1972-73, 1973-74.

² 1972-73.

³ Second semester 1972-73 and first semester 1973-74.

⁴ On leave of absence 1973-74.

⁵ On leave of absence, first semester, 1973-74.

FACULTY

- JEWELL L. DELAUNE (1971, 1966), *Assistant Professor of Education*. A.B., M.A. and B.S. in L.S., Louisiana State University.
- JOHN B. DELOS (1971, 1971), *Assistant Professor of Physics*. B.S., University of Michigan; Ph.D., Massachusetts Institute of Technology.
- SUE ELLEN DELOS (1973, 1973), *Lecturer in Chemistry*. B.S., University of Michigan.¹
- PETER L. DERKS (1971, 1960), *Professor of Psychology*. A.B., Knox College; M.A., Harvard University; Ph.D., University of Pennsylvania.
- EDMUND T. DERRINGE (1970, 1957), *Assistant Professor of Physical Education for Men*. B.S., Georgetown University; M.Ed., College of William and Mary.
- JAN B. deWEYDENTHAL (1970, 1970), *Visiting Assistant Professor of Government*. LL.M., Jagiellonian University, Poland; Ph.D., University of Notre Dame.²
- ELSA S. DIDUK (1968, 1966), *Assistant Professor of Modern Languages*. B.S., Temple University; M.A., Columbia University.
- CIRILA DJORDJEVIC (1972, 1968), *Professor of Chemistry*. B.S., Zagreb University; Ph.D., University College, London (England).
- CARL R. DOLMETSCH (1967, 1959), *Professor of English*. A.B. and M.A., Drake University; Ph.D., University of Chicago.
- JOHN E. DONALDSON (1970, 1966), *Professor of Law*. A.B., University of Richmond; J.D., College of William and Mary; LL.M., Georgetown University.
- J. SCOTT DONALDSON (1969, 1966), *Associate Professor of English*. A.B., Yale University; M.A. and Ph.D., University of Minnesota.³
- LYNN D. DOVERSPIKE (1971, 1967), *Associate Professor of Physics*. B.S., Oklahoma State University; M.S., University of California, Los Angeles; Ph.D., University of Florida.
- DAVID D. DOW (1971, 1971), *Assistant Professor of Biology*. B.S., Drexel Institute of Technology; Ph.D., University of Georgia.
- JOHN H. DREW (1970, 1970), *Assistant Professor of Mathematics*. B.S., Case Institute of Technology; Ph.D., University of Minnesota.
- JOHN L. DUPUY (1968, 1968), *Assistant Professor of Marine Science*. B.S., Oglethorpe University; M.S., Rutgers, The State University; Ph.D., University of Washington.
- HUGH B. EASLER (1962, 1962), *Assistant Professor of Mathematics*. A.B., Wofford College; M.S., University of South Carolina.
- MORTON ECKHAUSE (1973, 1964), *Professor of Physics*. A.B., New York University; M.S. and Ph.D., Carnegie Institute of Technology.⁴
- VERNON H. EDMONDS (1971, 1967), *Professor of Sociology*. A.B., Oklahoma State University; M.S., Purdue University; Ph.D., University of Missouri.
- JACK D. EDWARDS (1973, 1962), *Professor of Government*. A.B., Macalester College; LL.B., Harvard Law School; Ph.D., Vanderbilt University.
- PIETER ELGERS (1970, 1970), *Assistant Professor of Business Administration*. B.B.A., Manhattan College; M.B.A., St. John's University; C.P.A.³
- ARCHIBALD C. ELIAS, JR. (1972, 1972), *Instructor in English*. A.B., Princeton University; M.A., Stanford University.
- NATHANIEL Y. ELLIOTT (1970, 1963), *Associate Professor of English*. B.S., State University of New York, Fredonia; M.A., Syracuse University; Ph.D., Cornell University.
- PETER J. EMANUEL, Major (1972, 1972), *Assistant Professor of Military Science*. B.S., Colorado State University; M.Ed., College of William and Mary.

¹ Second semester, 1972-73.

² On leave of absence, first semester, 1973-74.

³ On leave of absence, 1972-73.

⁴ On leave second semester 1972-73 and first semester 1973-74.

FACULTY

- ANTHONY J. ESLER (1972, 1962), *Professor of History*. A.B., University of Arizona; M.A. and Ph.D., Duke University.
- FRANK BROOKE EVANS, III (1961, 1947), *Professor of English*. A.B., Amherst College; M.A. and Ph.D., Princeton University.
- JUDITH EWELL (1971, 1971), *Assistant Professor of History*. A.B., Duke University., Ph.D., University of New Mexico.
- MICHAEL A. FAIA (1970, 1970), *Associate Professor of Sociology*. A.B., University of Southern California; M.A., University of Chicago; Ph.D., University of Southern California.
- CHING SENG FANG (1973, 1969), *Associate Professor of Marine Science*. B.S., National Taiwan University; M.S. and Ph.D., North Carolina State University.
- MARTIN F. FARRELL (1973, 1973), *Acting Assistant Professor of Government*. A.B., DePauw University; M.A., University of Chicago.¹
- NORMAN J. FASHING (1973, 1973), *Assistant Professor of Biology*. A.B. and M.A., Chico State College.
- CARL A. FEHR (1961, 1945), *Chancellor Professor of Music*. A.B. and M.A., University of Texas; M.Mus., University of Michigan; Ed.D., Columbia University.
- ROBERT J. FEHRENBACH (1969, 1967), *Associate Professor of English*. A.B., Westminster College, Missouri; M.A., Vanderbilt University; Ph.D., University of Missouri
- DON E. FEHRENBACHER (1973, 1973), *James Pinckney Harrison Professor of History*. A.B., Cornell College; M.A. and Ph.D., University of Chicago; M.A., Oxford University.
- NORMAN S. FIERING (1972, 1969), *Lecturer in History*. A.B., Dartmouth College; M.A. and Ph.D., Columbia University.
- DAVID H. FINIFTER (1973, 1973), *Assistant Professor of Economics*. B.S., Loyola College, Baltimore; M.A., University of Pittsburgh.
- THOMAS M. FINN (1973, 1973), *Associate Professor of Religion*. A.B. and M.A., St. Paul's College; Th.L. and Th.D., The Catholic University of America.
- EMERIC FISCHER (1969, 1964), *Professor of Law*. B.S., University of South Carolina; B.C.L. and L.&T.M., College of William and Mary.
- WARREN ANTHONY FITCH (1972, 1972), *Adjunct Professor of Law*. A.B., Princeton University; J.D., Harvard University.
- S. STUART FLANAGAN (1973, 1968), *Associate Professor of Education*. B.S., Washington and Lee University; M.Ed. and Ed.D., University of Virginia.
- EDWARD L. FOGLER, Lieutenant Colonel (1971, 1971), *Assistant Professor of Military Science*. A.B. and M.A., Western Maryland College.
- LEWIS A. FOSTER, JR. (1962, 1954, 1955), *Associate Professor of Philosophy*. A.B. and M.A., University of Virginia; Ph.D., University of Udaipur.
- HAROLD LEES FOWLER (1946, 1934), *Professor of History*. A.B., Dartmouth College; M.A. and Ph.D., Harvard University.
- ALVIN Z. FREEMAN (1969, 1967), *Professor of History*. B.S., Virginia Military Institute; M.A., Brown University; Ph.D., University of Toronto.
- MARGARET W. FREEMAN (1970, 1967), *Assistant Professor of English*. A.B., Brown University; M.A., Smith College; M.A., Middlebury College.
- HERBERT FRIEDMAN (1973, 1963), *Professor of Psychology*. A.B., Brooklyn College; M.A. and Ph.D., University of Connecticut.
- CHRISTIAN FRONSDAL (1973, 1973), *Visiting Professor of Physics*. B.S., University of Bergen; Ph.D., University of California, Los Angeles.¹
- ALAN E. FUCHS (1969, 1969), *Assistant Professor of Philosophy*. B.S., Massachusetts Institute of Technology; M.A. and Ph.D., Harvard University.

¹ First semester, 1973-74.

FACULTY

- PHILIP J. FUNIGIELLO (1971, 1966), *Associate Professor of History*. A.B., Hunter College; M.A., University of California, Berkeley; Ph.D., New York University.
- HERBERT O. FUNSTEN (1968, 1963), *Professor of Physics*. A.B., M.A. and Ph.D., University of Virginia.
- ARMAND J. GALFO (1968, 1958), *Professor of Education*. A.B., M.Ed. and Ed.D., University of Buffalo.
- WILLIAM E. GARLAND, JR. (1972, 1972), *Assistant Professor of Education*. B.A., University of New Hampshire; M.S., Utah State University.
- MARTIN A. GARRETT (1968, 1963), *Associate Professor of Economics*. B.S., Middle Tennessee State College; Ph.D., Vanderbilt University.
- S. PETER GARY (1970, 1970), *Assistant Professor of Physics*. B.S., Case Institute of Technology; M.A. and Ph.D., Washington University, St. Louis.
- KEVIN E. GEOFFROY (1969, 1965), *Associate Professor of Education*. A.B., Tufts University; M.Ed., Boston University; Ed.D., Arizona State University.
- DANIEL R. GERBER (1969, 1969), *Associate Professor of Education*. A.B., Goshen College; Ph.D., University of Denver.
- NORMAN E. GIBBS (1969, 1969), *Assistant Professor of Mathematics*. B.S., Ursinus College; M.S. and Ph.D., Purdue University.
- T. CARTER GLEYSTEEN (1973, 1970), *Lecturer in Business Administration*. A.B., Yale University.
- WILLIAM C. GOFF (1969, 1969), *Assistant Professor of Modern Languages*. A.B., University of Vermont; B.F.T., American Institute for Foreign Trade; M.A., Middlebury College.
- BRUCE K. GOODWIN (1971, 1963), *Professor of Geology*. A.B., University of Pennsylvania; M.S. and Ph.D., Lehigh University.
- HAYDEN H. GORDON (1971, 1971), *Instructor in Marine Science*. B.S. and M.S., College of William and Mary.
- BRUCE S. GRANT (1972, 1968), *Associate Professor of Biology*. B.S., Bloomsburg State College; M.S. and Ph.D., North Carolina State University at Raleigh.
- GEORGE C. GRANT (1968, 1968), *Assistant Professor of Marine Science*. B.S., University of Massachusetts; M.A., College of William and Mary; Ph.D., University of Rhode Island.
- GEORGE W. GRAYSON, JR. (1970, 1968), *Associate Professor of Government*. A.B., University of North Carolina; M.A. and Ph.D., Johns Hopkins University.
- GERALD A. GREENBERGER (1972, 1972), *Visiting Assistant Professor of History*. A.B., Rutgers University.¹
- ROBERT I. GREENE (1972, 1972), *Instructor in English*. A.B., Brooklyn College; M.A., Indiana University.
- FRANZ L. GROSS (1970, 1970), *Associate Professor of Physics*. A.B., Swarthmore College; Ph.D., Princeton University.²
- ANTHONY L. GUENTHER (1972, 1967), *Associate Professor of Sociology*. A.B., Vanderbilt University; M.A., Northwestern University; Ph.D., Purdue University.³
- MARK G. GULESIAN (1970, 1970), *Assistant Professor of Education*. A.B., Tufts University; M.Ed. and Ed.D., University of Massachusetts.
- ALBERT E. HAAK (1971, 1947), *Professor of Theatre and Speech*. A.B., Lawrence College; M.A., College of William and Mary.
- PAUL A. HAEFNER, JR. (1969, 1969), *Associate Professor of Marine Science*. B.S., Franklin and Marshall College; M.S. and Ph.D., University of Delaware.

¹ 1972-73 only

² On leave of absence 1972-73 and 1973-74.

³ On leave of absence first semester 1973-74.

FACULTY

- GUSTAV W. HALL (1968, 1963), *Associate Professor of Biology*. A.B., and M.S., Ohio University; Ph.D., Indiana University.
- RONALD A. HALLETT (1970, 1970), *Assistant Professor of Modern Languages*. A.B., M.A., and Ph.D., Pennsylvania State University.
- MARGARET L. HAMILTON (1969, 1953), *Professor of Government*. A.B., University of Michigan; M.A. and Ph.D., Columbia University.
- BEN A. HAMMACK (1958, 1958), *Lecturer in Psychology*. A.B. and Ph.D., University of Texas.
- ROBERT J. HANNY (1969, 1969), *Associate Professor of Education*. B.S., M.A., and Ph.D., Ohio State University.
- EUGENE RAE HARCUM (1965, 1958), *Professor of Psychology*. B.S., College of William and Mary; M.A., The Johns Hopkins University; Ph.D., University of Michigan.
- WILLIAM J. HARGIS, JR. (1959, 1955), *Professor of Marine Science*. A.B. and M.A., University of Richmond; Ph.D., Florida State University.
- TRUDIER HARRIS (1973, 1973), *Assistant Professor of English*. A.B., Stillman College; M.A. and Ph.D., Ohio State University.
- CLYDE A. HAULMAN (1972, 1969), *Associate Professor of Economics*. A.B., M.S., and Ph.D., Florida State University.
- DEXTER S. HAVEN (1959, 1949), *Associate Professor of Marine Science*. B.S. and M.S., Rhode Island State College.
- STEVEN M. HAYNIE (1970, 1970), *Instructor in Physical Education for Men*. B.S., Northwestern State College; M.S., University of Tennessee.
- THOMAS L. HEACOX (1973, 1970), *Assistant Professor of English*. A.B., Pennsylvania State University; M.A., The Johns Hopkins University.
- THOMAS K. HEARN, JR. (1968, 1965), *Associate Professor of Philosophy*. A.B., Birmingham-Southern College; B.D., Southern Baptist Theological Seminary; Ph.D., Vanderbilt University.
- PAUL HELFRICH (1971, 1971), *Instructor in Fine Arts*. B.F.A. and M.F.A., Ohio University.
- DONALD J. HERRMANN (1963, 1951), *Professor of Education*. B.Ed., Northern Illinois University; M.A. and Ph.D., Michigan State University.
- TREVOR B. HILL (1970, 1963), *Professor of Chemistry*. B.S., University of Alberta, Canada; Ph.D., Cornell University.
- SPENCER T. HOCKADAY, Colonel (1972, 1972), *Professor of Military Science*. A.B., Virginia Military Institute; M.A., Michigan State University.
- E. LEWIS HOFFMAN (1968, 1947), *Professor of Modern Languages*. B.S., Roanoke College; M.A. and Ph.D., George Washington University.
- WALTER J. HOAGMAN (1971, 1971), *Assistant Professor of Marine Science*. B.S., Eastern Michigan University; M.S., University of Michigan; Ph.D., University of Wisconsin.
- DAVID L. HOLMES, JR. (1973, 1965), *Associate Professor of Religion*. A.B., Michigan State University; M.A., Columbia University; M.A., and Ph.D., Princeton University.
- H. LESTER HOOKER, JR. (1970, 1963), *Associate Professor of Physical Education for Men*. A.B., M.Ed., College of William and Mary.
- WRIGHT B. HOUGHLAND (1967, 1967), *Lecturer in Fine Arts*. B.Arch., University of Virginia.
- STANLEY HUMMEL (1966, 1964), *Research Engineer in Physics*.
- MARTHA B. HUNSUCKER (1972, 1967, 1972), *Instructor in Modern Languages*. A.B., Barnard College; M.A., University of Virginia.
- T. HENRY HUTCHINSON (1972, 1972), *Visiting Professor of Law*. B.S. and J.D., University of Colorado.¹

¹ 1972-73 only.

FACULTY

- PAUL V. HYER (1969, 1968), *Assistant Professor of Marine Science*. B.S., University of Notre Dame; Ph.D., University of Maryland.
- ARTHUR D. ISHAM, Captain (1971, 1971), *Assistant Professor of Military Science*. A.B., Stanford University.¹
- SATOSHI ITO (1971, 1965), *Associate Professor of Sociology*. A.B., California State College at Long Beach; M.A. and Ph.D., University of North Carolina, Chapel Hill.
- CHRISTINA WHYTOCK JACKSON (1969, 1969), *Acting Assistant Professor of Physical Education for Women*. B.S. and M.Ed., Springfield College.¹
- DAVID CLAY JENKINS (1968, 1956), *Professor of English*. A.B. and M.A., University of Alabama; Ph.D., University of Iowa.
- DUDLEY M. JENSEN (1962, 1951), *Associate Professor of Physical Education for Men*. B.S., Springfield College; M.A., Teachers College, Columbia University.
- GERALD H. JOHNSON (1970, 1965), *Associate Professor of Geology*. B.S., M.A. and Ph.D., Indiana University.
- HERBERT A. JOHNSON (1967, 1967), *Lecturer in History*. A.B., M.A. and Ph.D., Columbia University; LL.B., New York Law School.
- LUDWELL H. JOHNSON, III (1965, 1955), *Professor of History*. A.B. and Ph.D., The Johns Hopkins University.
- ROBERT A. JOHNSTON (1966, 1963), *Professor of Psychology*. A.B., Haverford College; M.A. and Ph.D., State University of Iowa.
- THOMAS H. JOLLS (1968, 1968), *Professor of Law*. A.B. and J.D., University of Michigan.
- RAJ K. JOLLY (1971, 1971), *Lecturer in Physics*. M.S., Panjab University; Ph.D., University of Pittsburgh.
- DAVID H. JONES (1972, 1967), *Professor of Philosophy*. A.B., University of Missouri; M.A. and Ph.D., Harvard University.²
- EDWARD E. JONES (1971, 1963), *Associate Professor of Physical Education for Men*. B.S. and M.Ed., College of William and Mary.
- GILBERT C. JONES (1964, 1964), *Assistant Professor of Business Administration*. M.B.A., Wharton School of Finance, University of Pennsylvania; J.D., College of William and Mary.
- J. WARD JONES, JR. (1967, 1961), *Chancellor Professor of Classical Studies*. A.B., University of Richmond; M.A. and Ph.D., University of North Carolina.
- ROBERT C. JONES (1967, 1967), *Associate Professor of Education*. B.S., Oklahoma City University; M.S., Oklahoma State University; Ph.D., University of Oklahoma.
- ROBERT A. JORDAN (1971, 1971), *Assistant Professor of Marine Science*. B.S., M.S., and Ph.D., University of Michigan.
- VIRGINIA S. JORDAN (1971, 1971), *Assistant Professor of Mathematics*. A.B., Radcliffe College; M.S., Harvard University.³
- ALEXANDER KALLOS (1964, 1949), *Professor of Modern Languages*. M.A. and Ph.D., University of Pennsylvania.
- JOHN ROBERT KANE (1971, 1964), *Associate Professor of Physics*. B.S., Loyola College; M.S. and Ph.D., Carnegie Institute of Technology.
- EDWARD KATZ (1963, 1947), *Instructor in Chemistry*. B.S., College of William and Mary.
- STUART W. KATZKE (1972, 1972), *Assistant Professor of Mathematics*. B.S., City College of New York; M.S., Trinity College; Ph.D., Case Western Reserve University.
- FREDERICK Y. KAZAMA (1969, 1969), *Assistant Professor of Marine Science*. A.B., University of Nebraska; Ph.D., University of California.

¹ 1972-73 only.

² On leave first semester 1972-73.

³ 1972-73.

FACULTY

- E. MORGAN KELLEY, JR. (1968, 1968), *Assistant Professor of Modern Languages*. A.B., Washington and Lee University; M.A. and Ph.D., Michigan State University.
- MARC MENACHEM KELLNER (1973, 1973), *Lecturer in Religion*. A.B., M.A., and Ph.D., Washington University.
- KEVIN P. KELLY (1973, 1973), *Assistant Professor of History*. A.B. and M.A., Michigan State University; Ph.D., University of Washington.
- JON S. KERNER (1969, 1969), *Assistant Professor of Sociology*. B.S., Carroll College; M.A. and Ph.D., Indiana University.
- R. WAYNE KERNODLE (1953, 1945), *Professor of Sociology*. A.B., M.A. and Ph.D., University of North Carolina.
- RICHARD L. KIEFER (1968, 1965), *Associate Professor of Chemistry*. A.B., Drew University; Ph.D., University of California, Berkeley.
- HAMILTON KILLEN, JR. (1968, 1968), *Assistant Professor of Modern Languages*. A.B., University of Maryland; M.A. and Ph.D., Stanford University.
- CHONGHAN KIM (1970, 1964), *Professor of Government*. A.B., M.A. and Ph.D., Indiana University.
- JOHN R. KING (1971, 1971), *Lecturer in Philosophy*. A.B., University of Richmond; Th.M., Union Theological Seminary.¹
- YONA Z. KNORR (1971, 1971), *Lecturer in Music*. Teacher's Diploma in Piano and Piano Pedagogy, Rubin Academy of Music, Jerusalem, Israel; M.M., University of Texas.
- MARCIA MARIE KOLLER (1968, 1968), *Lecturer in Music*. A.B., University of Minnesota.
- JAMES D. KORNWOLF (1971, 1968), *Associate Professor of Fine Arts*. B.F.A., University of Illinois; M.A., University of Wisconsin; Ph.D., Courtauld Institute of Art, University of London.
- WILLIAM J. KOSSLER (1970, 1969), *Associate Professor of Physics*. B.S., Massachusetts Institute of Technology; Ph.D., Princeton University.
- DAVID E. KRANBUEHL (1970, 1970), *Assistant Professor of Chemistry*. A.B., DePauw University; Ph.D., University of Wisconsin.
- GARY A. KREPS (1972, 1972), *Assistant Professor of Sociology*. A.B., University of Akron; M.A. and Ph.D., Ohio State University.
- MARY ANNE KREUTZER (1973, 1973), *Assistant Professor of Psychology*. A.B., Simon Fraser University, Canada.
- JOHN G. KRUCHKO (1973, 1973), *Lecturer in Economics*. A.B., Xavier University; M.A., University of Cincinnati.²
- ALBERT Y. KUO (1973, 1970), *Associate Professor of Marine Science*. B.S., Taiwan University; M.S., University of Iowa; Ph.D., The Johns Hopkins University.
- ALEXANDER I. KURTZ (1967, 1962), *Associate Professor of Modern Languages*. Licentiate and M.A., Leopold-Francis University, Innsbruck, Austria; M.A., Rutgers University; Th.D., Leopold-Francis University.
- ANN T. LAMBERT (1969, 1969), *Assistant Professor of Physical Education for Women*. B.S., Appalachian State University; M.S.P.E., University of North Carolina, Greensboro.³
- IRMA M. LANG (1973, 1973), *Visiting Associate Professor of Law*. A.B., Ohio State University; M.A., Ph.D., Harvard University; J.D., Georgetown University.⁴
- JOHN F. LAVACH (1970, 1967), *Associate Professor of Education*. A.B., Montclair State College; M.A., Fairleigh Dickinson University; Ed.D., Duke University.
- JAMES D. LAVIN (1970, 1968), *Associate Professor of Modern Languages*. A.B. and Ph.D., Florida State University.

¹ First semester 1972-73.

² Second semester, 1972-73.

³ 1972-73.

⁴ 1973-74 only.

FACULTY

- JAMES D. LAWRENCE, JR. (1968, 1960), *Adjunct Professor of Physics*. B.S., Virginia Military Institute; M.A. and Ph.D., University of Virginia.
- SIDNEY H. LAWRENCE (1965, 1961), *Associate Professor of Mathematics*. A.B., M.A. and Ph.D., University of Virginia.
- LEWIS W. LEADBEATER (1968, 1965), *Associate Professor of Classical Studies*. A.B., University of Pittsburgh; M.A. and Ph.D., New York University.
- JEROME F. LEAVELL (1972, 1972), *Associate Professor of Law*. A.B., J.D., University of Mississippi; LL.M., J.S.D., Yale University.
- VERA ZATHURECZKY LENDVAY (1969, 1969), *Lecturer in Music*. Diploma, Professor of Music and Performing Artist, Franz Liszt Academy of Music.
- WILLIAM W. LIDDELL (1971, 1971), *Assistant Professor of Business Administration*. B.B.A., Western Michigan University; M.B.A., Wayne State University; Ph.D., Pennsylvania State University.
- VICTOR A. LIGUORI (1970, 1964), *Associate Professor of Sociology*. A.B., Haverford College; M.A. and Ph.D., Princeton University.
- MONT LINKENAUER (1969, 1960), *Associate Professor of Physical Education for Men*. B.S. and M.Ed., College of William and Mary; R.P.T., Medical College of Virginia.
- JAMES C. LIVINGSTON (1968, 1968), *Associate Professor of Religion*. A.B., Kenyon College; B.D., Union Theological Seminary, New York; Ph.D., Columbia University.¹
- DON W. LLEWELLYN (1972, 1969), *Professor of Law*. A.B., Dickinson College; J.D., Dickinson School of Law; LL.M., New York University.
- JOSEPH LOESCH (1969, 1969), *Assistant Professor of Marine Science*. B.S., University of Rhode Island; M.S. and Ph.D., University of Connecticut.
- WILLIAM FRANK LOSITO (1972, 1972), *Assistant Professor of Education*. B.A., University of Dayton; Ph.D., Indiana University.
- HARRY R. LOYD, JR. (1971, 1971), *Lecturer in Music*. B.M., Shenandoah Conservatory of Music.
- ROBERT P. MACCUBBIN (1973, 1964), *Associate Professor of English*. A.B., The Johns Hopkins University; M.A. and Ph.D., University of Illinois.
- FRANK A. MACDONALD (1955, 1955), *Professor of Philosophy*. A.B. and M.A., College of William and Mary; M.A., Harvard University.
- WILLIAM G. MACINTYRE (1965, 1965), *Assistant Professor of Marine Science*. B.S., M.S. and Ph.D., Dalhousie University.
- WILLIAM J. MADDOCKS (1971, 1971), *Assistant Professor of Business Administration*. B.S., Naval Academy; M.S., Purdue University; M.B.A., George Washington University.
- MICHAEL T. MADISON (1972, 1972), *Associate Professor of Law*. A.B., George Washington University; J.D., Harvard University; LL.M., New York University.
- ROBERT MAIDMENT (1970, 1970), *Associate Professor of Education*. B.S., M.Ed., and Ed.D., University of Virginia.
- CHARLOTTE P. MANGUM (1968, 1964), *Associate Professor of Biology*. A.B., Vassar College; M.S. and Ph.D., Yale University.²
- KENNETH L. MARCELLUS (1972, 1970), *Assistant Professor of Marine Science*. B.S., Iowa State University; Ph.D., Rutgers University.
- JAMES E. MARLOW (1972, 1969), *Assistant Professor of English*. A.B., Dartmouth College; M.A., and Ph.D., University of California, Davis.³
- J. LUKE MARTEL (1963, 1963), *Associate Professor of Modern Languages*. A.B., University of Arizona; Licence ès Lettres, Université de Montpellier; Doctorat Université d'Aix-Marseille.

¹ On leave of absence 1972-73.

² On leave of absence 2nd semester 1972-73 and 1973-74.

³ 1972-73.

FACULTY

- MARTIN C. MATHES (1967, 1967), *Associate Professor of Biology*. A.B., Miami University; M.S. and Ph.D., University of Maryland.
- CHARLES O. MATTHEWS, II (1973, 1973), *Assistant Professor of Education*. A.B., Davidson College; M.A.T., Harvard University; Ph.D., Duke University.
- JOHN R. MATTHEWS, JR. (1963, 1961), *Associate Professor of Economics*. B.S. and M.A., University of Virginia.
- GILBERT H. MCARTHUR (1971, 1966), *Associate Professor of History*. A.B., Friends University; Ph.D., University of Rochester.
- JAMES N. MCCORD, JR. (1969, 1965), *Associate Professor of History*. A.B., Emory University; M.A. and Ph.D., The Johns Hopkins University.
- WILLIAM MCCORMICK, JR. (1972, 1969), *Professor of Business Administration*. B.S. and M.B.A., Indiana University; Ph.D., Case Western Reserve University; C.P.A.¹
- CECIL M. MCCULLEY (1963, 1948), *Professor of English*. A.B. and M.A., Southern Methodist University; Ph.D., Columbia University.
- BRUCE T. MCCULLY (1961, 1940), *Professor of History*. A.B., Rutgers University; M.A. and Ph.D., Columbia University.
- JOHN J. MCCUSKER (1971, 1971), *Assistant Professor of History*. A.B., St. Bernard's Seminary and College; M.A., University of Rochester; Ph.D., University of Pittsburgh.¹
- MICHAEL MCGIFFERT (1972, 1972), *Visiting Professor of History*. A.B., Harvard College; B.D., Yale Divinity School; Ph.D., Yale University.
- VIRGIL V. MCKENNA (1973, 1962), *Professor of Psychology*. A.B., College of William and Mary; M.A., Swarthmore College; Ph.D., Princeton University.
- JOHN L. MCKNIGHT (1968, 1957), *Professor of Physics*. A.B., University of Michigan; M.S. and Ph.D., Yale University.
- HENRY E. MCLANE (1967, 1965), *Associate Professor of Philosophy*. A.B., George Washington University; M.A. and Ph.D., Yale University.
- WILLIAM G. MCNAIRY (1970, 1967), *Lecturer in Business Administration*. B.S., University of North Carolina; M.B.A., University of Virginia; C.P.A.¹
- JOHN V. MERRINER (1970, 1970), *Instructor in Marine Science*. A.B., Rutgers University; M.S., North Carolina State University.
- LOUIS P. MESSIER (1972, 1972), *Associate Professor of Education*. B.S., Johnson State College; M.Ed. and Ed.D., Boston University.
- DONALD J. MESSMER (1973, 1973), *Assistant Professor of Business Administration*. B.S.B.A., Washington University.
- TERRY L. MEYERS (1973, 1970), *Assistant Professor of English*. A.B., Lawrence University; M.A., University of Chicago.
- PATRICK H. MICKEN (1970, 1966), *Assistant Professor of Theatre and Speech*. B.S. and M.S., Southern Illinois University.
- C. RICHARD MIDDLETON (1972, 1972), *Assistant Professor of History*. A.B. and Ph.D., University of Exeter.
- ROBERT W. MILLER (1972, 1972), *Assistant Professor of Mathematics*. A.B., Park College; M.A. and Ph.D., University of Wisconsin.
- THELMA MILLER (1957, 1954), *Assistant Professor of Home Economics*. A.B., Berea College; M.S., University of Tennessee.¹
- JOSEPH A. MIRI (1970, 1970), *Assistant Professor of Government*. A.B., Wesleyan University; M.A., and Ph.D., Rutgers University.
- CARLISLE E. MOODY (1972, 1970), *Assistant Professor of Economics*. A.B., Colby College; M.A. and Ph.D., University of Connecticut.

¹ 1972-73.

FACULTY

- JOHN A. MOORE (1965, 1950), *Professor of Modern Languages*. B.S., Davidson College; M.A. and Ph.D., University of North Carolina.
- WILLIAM L. MORROW (1971, 1971), *Professor of Government*. A.B., Southwest Missouri State College; M.A. and Ph.D., University of Iowa.¹
- JOHN A. MUSICK (1970, 1968), *Assistant Professor of Marine Science*. A.B., Rutgers, The State University; M.A., Harvard University.
- FRASER NEIMAN (1958, 1938), *Professor of English*. A.B., Amherst College; M.A. and Ph.D., Harvard University.
- FRANCES H. NELSON (1971, 1968), *Assistant Professor of Education*. A.B., Winthrop College; M.Ed., College of William and Mary.
- ANNE TYLER NETICK (1967, 1962), *Assistant Professor of Modern Languages*. A.B., Randolph-Macon Woman's College; M.A., Columbia University; Ph.D., Vanderbilt University.
- ELSA NETTELS (1969, 1967), *Associate Professor of English*. A.B., Cornell University; M.A. and Ph.D., University of Wisconsin.²
- RICHARD K. NEWMAN, JR. (1966, 1946), *Professor of Fine Arts*. A.B., Dartmouth College; Ph.D., Yale University.
- MAYNARD M. NICHOLS (1961, 1961), *Associate Professor of Marine Science*. B.S., Columbia University; M.S., Scripps Institute of Oceanography; Ph.D., University of California, Los Angeles.
- LOUIS J. NOISIN (1972, 1972), *Assistant Professor of Anthropology*. B.Litt. and LL.B., University of Haiti.
- J. J. NORCROSS (1965, 1959), *Associate Professor of Marine Science*. A.B., William Jewel College; M.S., Michigan State University.
- WILLIAM E. O'CONNELL, JR. (1971, 1969), *Associate Professor of Business Administration*. A.B., Manhattan College; M.B.A., Columbia University; D.B.A., Indiana University.
- PETER V. O'NEIL (1969, 1967), *Associate Professor of Mathematics*. B.S., Fordham University; M.S. and Ph.D., Rensselaer Polytechnic Institute.
- JAMES M. ORTEGA (1973, 1973), *Adjunct Professor of Mathematics and Physics*. B.S., University of New Mexico; Ph.D., Stanford University.
- ROBERT A. ORWOLL (1972, 1969), *Associate Professor of Chemistry*. A.B., St. Olaf College; Ph.D., Stanford University.
- CURTIS H. O'SHELL (1968, 1968), *Associate Professor of Education*. B.A., Pennsylvania State University; M.A., Allegheny College; Ed.D., Pennsylvania State University.
- FRANKLYN D. OTT (1970, 1970), *Assistant Professor of Marine Science*. B.S., Lynchburg College; Ph.D., University of Kansas.
- PIERRE C. OUSTINOFF (1958, 1953), *Professor of Modern Languages*. A.B., M.A. and Ph.D., Columbia University.
- STEPHEN P. PALEDES (1968, 1954), *Associate Professor of Music*. Juilliard School of Music; A.B. and M.A., American University.
- MARIA ROBREDO PALMAZ (1972, 1964), *Assistant Professor of Modern Languages*. A.B., National Institute of Modern Languages, Buenos Aires; M.A., University of Cordoba; Diplôme De Culture Française Contemporaine, University of Paris.
- COLIN PARK (1973, 1973), *Professor of Business Administration*. M.B.A., University of Buffalo; Ph.D., University of Chicago.
- WILLIAM B. PARKHILL (1972, 1972), *Instructor in Physical Education for Men*. B.S., Lock Haven State College.
- SLOANE W. PAYNE, JR. (1970, 1970), *Assistant Professor of Psychology*. A.B., and Ph.D., University of North Carolina, Chapel Hill.

¹ On leave of absence, 1973-74.

² On leave of absence, second semester, 1973-74.

FACULTY

- ROY L. PEARSON (1971, 1971), *Associate Professor of Business Administration*. B.S. and Ph.D., University of Virginia.
- JENNETH L. PEIRCE (1972, 1972), *Instructor in English*. A.B., University of Cape Town; M.A., Tufts University.
- CLIFFORD H. PENCE, JR. (1973, 1970), *Assistant Professor of Theatre and Speech*. A.B., College of William and Mary; M.S., Temple University.
- CHARLES F. PERDRISAT (1969, 1966), *Associate Professor of Physics*. B.S., University of Geneva; D.Sc., Federal Institute of Technology, Zurich.¹
- FRANK O. PERKINS (1973, 1966), *Associate Professor of Marine Science*. A.B., University of Virginia; M.S. and Ph.D., Florida State University.
- KARL E. PETERS (1972, 1972), *Visiting Assistant Professor of Religion*. A.B., Carroll College; B.D., McCormick Theological Seminary; Ph.D., Columbia University.²
- KENNETH G. PETZINGER (1972, 1972), *Assistant Professor of Physics*. A.B., Princeton University; M.A., Columbia University; Ph.D., University of Pennsylvania.
- ARTHUR WARREN PHELPS (1945, 1945), *Professor of Law*. A.B., Washington and Lee University; M.A., Ohio State University; J.D., University of Cincinnati; LL.M., Columbia University.
- HELEN M. PIKE (1973, 1970), *Assistant Professor of English*. A.B. and M.A., Hunter College.
- WILLIAM CARTER POLLARD (1966, 1966), *Librarian*. A.B., University of North Carolina; M.A., Florida State University.
- WILLIAM G. POOLE, JR. (1970, 1970), *Assistant Professor of Mathematics*. A.B. and M.A., University of Texas; Ph.D., University of California, Berkeley.
- BOLLING RAINES POWELL, JR. (1969, 1969), *Professor of Law*. A.B., Birmingham-Southern College; M.A. and LL.B., University of Virginia.
- F. DOUGLAS PRILLAMAN (1969, 1969), *Associate Professor of Education*. B.S., Lincoln Memorial University; M.Ed., College of William and Mary; Ed.D., George Washington University.
- RICHARD H. PROSL (1969, 1966), *Associate Professor of Mathematics*. B.S., College of William and Mary; A.B. and M.A., University College, Oxford; M.S. and Ph.D., Rensselaer Polytechnic Institute.
- JOHN S. QUINN (1959, 1949, 1956), *Professor of Business Administration*. B.S., State Teachers College, Salem, Massachusetts; M.C.S., Boston University; M.B.A., Harvard University; C.P.A., College of William and Mary; M.B.A., Harvard University; Ph.D., Columbia University.
- LARRY RABINOWITZ (1968, 1968), *Assistant Professor of Mathematics*. A.B., M.S., and Ph.D., Rutgers University.
- JOHN H. RANDOLPH (1969, 1967), *Instructor in Physical Education for Men*. A.B. and M.Ed., College of William and Mary.
- ELIZABETH S. REED (1968, 1955), *Associate Professor of Philosophy*. A.B., Butler University; M.A., Florida State University; Ph.D., Duke University.
- LINDA COLLINS REILLY (1969, 1969), *Assistant Professor of Classical Studies*. A.B., Vassar College; M.A. and Ph.D., Johns Hopkins University.
- THEODORE R. REINHART (1968, 1968), *Assistant Professor of Anthropology*. A.B., Pennsylvania State University; M.A., George Washington University; Ph.D., University of New Mexico.
- EDWARD A. REMLER (1970, 1967), *Associate Professor of Physics*. B.S., Massachusetts Institute of Technology; M.S., Columbia University; Ph.D., University of North Carolina, Chapel Hill.
- DOUG RENDLEMAN (1973, 1973), *Assistant Professor of Law*. A.B., M.A., J.D., University of Iowa; LL.M., University of Michigan.
- STEPHEN P. REYNA (1971, 1971), *Assistant Professor of Anthropology*. A.B., Columbia College.²

¹ On leave of absence 1973-74.

² 1972-73.

FACULTY

- THOMAS L. REYNOLDS (1960, 1960), *Professor of Mathematics*. B.S., Guilford College; M.A. and Ph.D., University of North Carolina.
- EDWIN H. RHYNE (1966, 1954), *Professor of Sociology*. B.S., Clemson University; M.A. and Ph.D., University of North Carolina.
- ROGER R. RIES (1972, 1968), *Associate Professor of Education*. B.S., M.Ed. and Ph.D., University of Missouri.
- BRUCE D. RIGELMAN (1973, 1973), *Assistant Professor of Government*. A.B., University of Minnesota.
- EDWARD MILES RILEY (1963, 1963), *Lecturer in History*. A.B., Washington and Lee University; M.A. and Ph.D., University of Southern California.
- ROBIN L. ROARK (1968, 1968), *Lecturer in Music*. B.M., Oklahoma Baptist University; M.S., University of Southern California.
- SHIRLEY G. ROBY (1970, 1964), *Associate Professor of Physical Education for Women*. B.S., Longwood College; M.F.A., University of North Carolina, Greensboro.
- JAMES M. ROHERTY (1967, 1963), *Professor of Government*. A.B. and M.A., University of Washington; Ph.D., University of Wisconsin.¹
- CARL A. ROSEBERG (1966, 1947), *Professor of Fine Arts*. B.F.A. and M.F.A., State University of Iowa; Life Fellow, International Institute of Arts and Letters.
- ELLEN ROSEN (1971, 1967), *Associate Professor of Psychology*. A.B., Carleton College; M.A. and Ph.D., University of Illinois.
- GEORGE T. RUBLEIN (1966, 1966), *Associate Professor of Mathematics*. B.S., St. Mary's University; M.S. and Ph.D., University of Illinois.
- FRANCIS W. RUSHING (1972, 1972), *Associate Professor of Economics*. A.B., University of Georgia; Ph.D., University of North Carolina, Chapel Hill.
- EVON P. RUZECKI (1965, 1965), *Assistant Professor of Marine Science*. A.B., Knox College; M.S., University of Wisconsin.
- RONALD R. SAINT-ONGE (1970, 1970), *Assistant Professor of Modern Languages*. A.B., Providence College; M.A. and Ph.D., Vanderbilt University.
- ANTHONY L. SANCETTA (1961, 1948), *Professor of Business Administration*. A.B., Western Reserve University; M.S. and Ph.D., Columbia University.
- ALLEN R. SANDERSON (1973, 1973), *Assistant Professor of Economics*. A.B., Brigham Young University; M.A., University of Chicago.
- ANTHONY J. SANTORO (1970, 1970), *Assistant Professor of Law*. A.B., Boston College; J.D. and LL.M., Georgetown University Law Center.¹
- JAGDISH C. SANWAL (1966, 1966), *Associate Professor of Mathematics*. B.S. and M.S., Lucknow University, India; Ph.D., Indiana University.
- JAMES B. SAVAGE (1970, 1970), *Assistant Professor of English*. A.B., Princeton University; M.A., Northwestern University; Ph.D., Princeton University.
- HOWARD M. SCAMMON, JR. (1967, 1948), *Professor of Theatre and Speech*. A.B., College of William and Mary; M.A., Northwestern University.
- ELMER J. SCHAEFER (1973, 1973), *Assistant Professor of Law*. A.B., Northwestern University; M.A., J.D., Harvard University.
- MELVYN D. SCHIAVELLI (1971, 1968), *Associate Professor of Chemistry*. B.S., DePaul University; Ph.D., University of California, Berkeley.²
- LEONARD G. SCHIFRIN (1970, 1965), *Professor of Economics*. A.B. and M.A., University of Texas; Ph.D., University of Michigan.
- HERMAN A. SCHMIDT, Major (1973, 1973), *Assistant Professor of Military Science*. A.B., College of William and Mary.

¹ 1972-73

² On leave of absence second semester 1972-73.

FACULTY

- KURT T. SCHMIDT (1972, 1972), *Lecturer in Psychology*. M.D., University of Munich Medical School.
- ROBERT J. SCHOLNICK (1973, 1967), *Associate Professor of English*. A.B., University of Pennsylvania; M.A. and Ph.D., Brandeis University.
- HARLAN E. SCHONE (1968, 1965), *Associate Professor of Physics*. B.S., University of Illinois; Ph.D., University of California, Berkeley.
- JOSEPH LEE SCOTT (1970, 1970), *Assistant Professor of Biology*. A.B. and M.A., University of California, Santa Barbara; Ph.D., University of California, Irvine.
- ROBERT E. SCOTT (1973, 1969), *Professor of Law*. A.B. Oberlin College; J.D., College of William and Mary; LL.M., University of Michigan.¹
- JOHN E. SELBY (1970, 1963), *Professor of History*. A.B., Harvard College; M.A. and Ph.D., Brown University.
- KELLY G. SHAVER (1973, 1968), *Associate Professor of Psychology*. B.S. and M.S., University of Washington; Ph.D., Duke University.
- GLENN D. SHEAN (1970, 1966), *Associate Professor of Psychology*. A.B., Louisiana State University, New Orleans; M.A. and Ph.D., University of Arizona.
- THOMAS F. SHEPPARD (1971, 1969), *Associate Professor of History*. A.B., Vanderbilt University; M.A., University of Nebraska; Ph.D., The Johns Hopkins University.¹
- ARDEN SHER (1972, 1967), *Professor of Physics*. B.S. and Ph.D., Washington University, St. Louis.
- CAROL W. SHERMAN (1970, 1963), *Associate Professor of Physical Education for Women*. A.B., Hollins College; M.A., Sarah Lawrence College.
- RICHARD B. SHERMAN (1970, 1960), *Professor of History*. A.B., Harvard University; M.A., University of Pennsylvania; Ph.D., Harvard University.
- ROGER SHERMAN (1966, 1946, 1966), *Associate Professor of Theatre and Speech*. A.B., College of William and Mary.
- ROBERT T. SIEGEL (1963, 1963), *Professor of Physics*. B.S., M.S. and D.Sc., Carnegie Institute of Technology.
- CRAIG L. SMITH (1970, 1970), *Assistant Professor of Marine Science*. A.B., The Johns Hopkins University; Ph.D., University of Florida.
- GARY A. SMITH (1969, 1969), *Assistant Professor of Modern Languages*. A.B., University of Kansas; Ph.D., University of Texas.
- HOWARD M. SMITH, JR. (1965, 1946), *Professor of Physical Education for Men*. B.S., College of William and Mary; M.S., Syracuse University.
- JAMES A. SMITH, Major (1971, 1971), *Assistant Professor of Military Science*. B.S., Clemson University.
- JAMES E. SMITH (1973, 1970), *Associate Professor of Business Administration*. A.B., Southeastern Louisiana College; M.B.A., University of Houston; Ph.D., University of Arizona; C.P.A.
- JERRY C. SMITH (1969, 1969), *Assistant Professor of Modern Languages*. A.B., University of Texas; M.A. and Ph.D., Cornell University.
- LEROY W. SMITH (1967, 1956), *Professor of English*. A.B., American University; M.A., George Washington University; Ph.D., Duke University.
- ROGER W. SMITH (1972, 1967), *Associate Professor of Government*. A.B., Harvard College; M.A. and Ph.D., University of California, Berkeley.
- JON F. SOEST (1968, 1967), *Assistant Professor of Physics*. A.B., Pomona College; M.S. and Ph.D., University of Washington.
- OSCAR B. SOUTHARD, II (1972, 1972), *Assistant Professor of English*. A.B., Texas Technological University; M.A. and Ph.D., Purdue University.

¹ On leave of absence 1972-73.

FACULTY

- RAYMOND W. SOUTHWORTH (1966, 1966), *Professor of Mathematics*. B.S., Worcester Polytechnic Institute; M.Eng. and D.Eng., Yale University.
- BERNICE M. SPEESE (1969, 1946), *Associate Professor of Biology*. B.S. and M.A., College of William and Mary; Ph.D., University of Virginia.
- DAVID P. STANFORD (1972, 1967), *Associate Professor of Mathematics*. A.B., Hartwick College; M.A. and Ph.D., University of North Carolina, Chapel Hill.
- MARVIN M. STANLEY (1971, 1968), *Associate Professor of Business Administration*. B.S., George Washington University; M.B.A., Harvard University; Ph.D., George Washington University.
- ALAN C. STEWART (1968, 1944), *Professor of Music*. A.B., Union College; M.A., Columbia University.
- PAUL K. STOCKMEYER (1971, 1971), *Assistant Professor of Mathematics*. A.B., Earlham College; M.A. and Ph.D., University of Michigan.
- HOWARD STONE (1963, 1948), *Professor of Modern Languages*. A.B., Pomona College; M.A., Claremont Graduate School and University Center; Ph.D., University of California, Berkeley.
- GEORGE V. STRONG (1971, 1967), *Associate Professor of History*. A.B., M.A. and Ph.D., University of North Carolina, Chapel Hill.
- TIMOTHY J. SULLIVAN (1972, 1972), *Assistant Professor of Law*. A.B., College of William and Mary; J.D., Harvard University.
- VINSON H. SUTLIVE, JR. (1972, 1972), *Associate Professor of Anthropology*. A.B., Ashbury College; B.D., Vanderbilt School of Religion; M.A., Scarrett College; Ph.D., University of Pittsburgh.
- WILLIAM F. SWINDLER (1958, 1958), *Professor of Law*. A.B. and B.S., Washington University, St. Louis; M.A. and Ph.D., University of Missouri; LL.B., University of Nebraska.
- JOHN W. SYKES (1970, 1963), *Associate Professor of Education*. B.S., New York State College; M.Ed., University of Virginia.
- JESSE S. TARLETON (1970, 1970), *Assistant Professor of Business Administration*. B.S., Pennsylvania State University; M.B.A., College of William and Mary; Ph.D., Cornell University.
- THADDEUS W. TATE, JR. (1969, 1961), *Professor of History*. A.B. and M.A., University of North Carolina; Ph.D., Brown University.
- KENT TEDIN (1973, 1973), *Acting Assistant Professor of Government*. A.B., Concordia College; M.A. and Ph.D., University of Iowa.¹
- C. RICHARD TERMAN (1969, 1963), *Professor of Biology*. A.B., Albion College; M.S. and Ph.D., Michigan State University.
- ELAINE M. THEMO (1971, 1966), *Associate Professor of Sociology*. A.B., Mount Holyoke College; M.A., University of North Carolina; Ph.D., American University.
- BETTY JO KREMER THOMAS (1970, 1970), *Instructor in Theatre and Speech*. A.B., Butler University; M.A., Bowling Green State University.²
- JOHN B. THOMAS (1971, 1971), *Assistant Professor of Geology*. A.B. and M.S., Miami University, Ohio.
- DAVID W. THOMPSON (1970, 1967), *Associate Professor of Chemistry*. B.S., Wheaton College; Ph.D., Northwestern University.
- JAMES J. THOMPSON, JR. (1971, 1971), *Assistant Professor of History*. A.B., Columbia Union College; M.A. and Ph.D., University of Virginia.
- THOMAS E. THORNE (1965, 1940), *Professor of Fine Arts*. B.F.A., Yale University.
- JANET TOMLINSON (1969, 1965), *Assistant Professor of Physical Education for Women*. A.B., Beloit College; M.A., University of Iowa.
- LELAND E. TRAYWICK (1967, 1967), *Professor of Business Administration*. A.B. and M.A., University of Missouri; Ph.D., University of Illinois.

¹ 1973-74

² 1972-73

FACULTY

- F. DONALD TRUESEDELL (1963, 1960), *Professor of Music*. B.M. and M.M., University of Michigan; A.M.D., University of Rochester.
- WILLIAM C. TURNER (1969, 1960), *Associate Professor of Mathematics*. B.S., Furman University; M.A., Duke University.
- J. ALLEN TYLER, (1969, 1969), *Assistant Professor of Modern Languages*. B.S., Virginia Polytechnic Institute; M.A., Middlebury College; Ph.D., University of Virginia.
- SHEPPARD YOUNG TYREE, JR. (1966, 1966), *Professor of Chemistry*. B.S. and Ph.D., Massachusetts Institute of Technology.
- PAUL UNGER (1968, 1968), *Professor of Education*. A.B., Western Michigan University; M.A. and Ph.D., University of Michigan.
- WILLARD A. VAN ENGEL (1961, 1946), *Professor of Marine Science*. Ph.B. and Ph.M., University of Wisconsin.
- MARION G. VANFOSSEN (1970, 1967), *Professor of Sociology*. A.B., Blackburn College; M.A., Pennsylvania State University; Ph.D., Emory University.
- JACK D. VAN HORN (1970, 1970), *Assistant Professor of Religion*. A.B., Ohio Wesleyan University; M.A. and Ph.D., Columbia University.
- RICHARD J. VARGO (1971, 1971), *Associate Professor of Business Administration*. B.S., Marietta College; M.B.A., Ohio University; D.B.A., University of Washington.¹
- CHARLES R. VARNER (1968, 1953), *Professor of Music*. B.M.E. and M.M., Northwestern University.
- W. LARRY VENTIS (1969, 1969), *Assistant Professor of Psychology*. B.S., M.A. and Ph.D., University of Tennessee.
- CARL W. VERMEULEN (1971, 1966), *Associate Professor of Biology*. A.B., Hope College; M.S. and Ph.D., University of Illinois.
- HANS C. VON BAEYER (1970, 1968), *Associate Professor of Physics*. A.B., Columbia College; M.Sc., University of Miami; Ph.D., Vanderbilt University.
- NICOLA VULETIC (1973, 1973), *Visiting Associate Professor of Chemistry*. B.Sc., University of Sarajevo, Yugoslavia; M.Sc. and Ph.D., University of Zagreb, Yugoslavia.²
- RICHARD E. WALCK (1972, 1970), *Associate Professor of Law*. A.B., Pennsylvania State University; LL.B. University of Virginia.
- HELEN C. WALKER (1969, 1969), *Assistant Professor of History*. A.B., College of William and Mary; M.A., Yale University.
- ALAN JOSEPH WARD (1969, 1967), *Associate Professor of Government*. B.Sc., University of London; M.A., University of Connecticut; Ph.D., University of London.
- STEWART A. WARE (1972, 1967), *Associate Professor of Biology*. B.S., Millsaps College; Ph.D., Vanderbilt University.
- JUNIUS ERNEST WARINNER, III (1963, 1963), *Instructor in Marine Science*. B.S. and M.A., College of William and Mary.
- WILLIAM H. WARREN (1972, 1970), *Associate Professor of Business Administration*. B.S., University of Richmond; M.S. and Ph.D., Purdue University.
- MARVIN L. WASS (1960, 1960), *Associate Professor of Marine Science*. B.S., Winona State College; M.S., Florida State University; Ph.D., University of Florida.
- KENNETH L. WEBB (1965, 1965), *Assistant Professor of Marine Science*. A.B., Antioch College; M.S. and Ph.D., Ohio State University.
- ROBERT H. WELCH (1970, 1970), *Instructor in Modern Languages*. A.B., Hampden-Sydney College; M.A., University of Pennsylvania.
- ROBERT E. WELSH (1968, 1963), *Professor of Physics*. B.S., Georgetown University; Ph.D., The Pennsylvania State University.³

¹ 1972-73

² 1973-74 only.

³ On leave of absence 1972-73.

FACULTY

- WALTER P. WENSKA (1972, 1972), *Assistant Professor of English*. A.B. and M.A., University of Hawaii.
- MILDRED BARRETT WEST (1968, 1959), *Associate Professor of Physical Education for Women*. B.S., Georgia State College for Women; M.A., University of Maryland.¹
- RONALD C. WHEELER (1972, 1972), *Assistant Professor of Education*. B.S., Western Illinois University; M.Ed., University of Pittsburgh; Ph.D., University of Minnesota.
- SCOTT CAMERON WHITNEY (1972, 1972), *Professor of Law*. A.B., University of Nevada; J.D., Harvard University.
- JAMES P. WHYTE, JR. (1958, 1958), *Professor of Law*. A.B., Bucknell University; M.A., Syracuse University; J.D., University of Colorado.
- PETER D. WIGGINS (1971, 1971), *Assistant Professor of English*. A.B., M.A. and Ph.D., Columbia University.
- STANLEY B. WILLIAMS (1948, 1948), *Professor of Psychology*. A.B. and M.A., University of California, Los Angeles; Ph.D., Yale University.
- STUART L. WILLIAMS (1972, 1972), *Assistant Professor of Business Administration*. B.A., Yale University.
- WALTER L. WILLIAMS, JR. (1972, 1972), *Assistant Professor of Law*. A.B., M.A., LL.B., University of Southern California; LL.M., J.S.D., Yale University.
- RICHARD A. WILLIAMSON (1972, 1970), *Associate Professor of Law*. B.B.A., Ohio University; J.D., College of Law, The Ohio State University.
- JOHN H. WILLIS, JR. (1967, 1959), *Associate Professor of English*. A.B., University of Virginia; M.A. and Ph.D., Columbia University.
- TERRENCE C. WINEBRENNER (1973, 1973), *Instructor in Theatre and Speech*. B.S. and M.A., Southwest Missouri State College.
- PATRICIA M. WINTER (1972, 1972), *Lecturer in Fine Arts*. B.F.A., Carnegie Institute of Technology; M.A., Western Reserve University.
- ROLF G. WINTER (1964, 1964), *Professor of Physics*. B.S., M.S. and D.Sc., Carnegie Institute of Technology.
- LAWRENCE L. WISEMAN (1971, 1971), *Assistant Professor of Biology*. A.B., Hiram College; M.A. and Ph.D., Princeton University.
- FRANK J. WOJCIK (1965, 1965), *Instructor in Marine Science*. B.S., University of Massachusetts; M.S., University of Alaska.
- J. L. WOOD (1961, 1959), *Professor of Marine Science*. B.S., Massachusetts State College; M.S., University of Massachusetts; Ph.D., Columbia University.
- BURTON M. WOODWARD (1969, 1969), *Associate Professor of Business Administration*. A.B., M.B.A., and Ph.D., University of Florida.
- YING-YEUNG YAM (1967, 1967), *Assistant Professor of Physics*. B.S., Trinity College, Connecticut; M.A., University of California, Berkeley; Ph.D., University of Pennsylvania.
- MARIO D. ZAMORA (1973, 1973), *Visiting Professor of Anthropology*. A.B. and M.A., University of the Philippines; Ph.D., Cornell University.²
- JOHN M. ZEIGLER (1971, 1971), *Professor of Marine Science*. B.A., University of Colorado, Boulder; Ph.D., Harvard University.
- JOSEPH R. ZEPKIN (1968, 1968), *Lecturer in Law*. A.B. and B.C.L., College of William and Mary.
- WALTER S. ZIMMERMANN (1966, 1966), *Associate Professor of Modern Languages*. B.S. and Ph.D., New York University.
- PAUL LEON ZUBKOFF (1970, 1970), *Associate Professor of Marine Science*. B.S., University of Buffalo; M.S., George Washington University; Ph.D., Cornell University.
- DAVID E. ZWERNER (1968, 1968), *Instructor in Marine Science*. B.S., George Washington University; M.A., College of William and Mary.

¹ On leave of absence 1972-73

² 1973-74 only.

LIBRARY AND HEALTH SERVICE STAFFS

Earl Gregg Swem Library Staff

WILLIAM CARTER POLLARD (1966, 1966), *Librarian*. B.A., University of North Carolina; M.A., Florida State University.

ALVA WARE STEWART (1971, 1971), *Associate Librarian*. A.B., University of North Carolina; M.A., Duke University; M.S.L.S., University of North Carolina.

KATHRYN JOAN BLUE (1968, 1968), *Assistant Catalog Librarian*. B.A., Cornell College; M.A., University of Wisconsin.

MARY LOUISE BROWN COBB (1970, 1967), *Catalog Librarian*. B.A., Wake Forest College; M.L.S., George Peabody College for Teachers.

MARGARET CELESTE COOK (1966, 1966), *Curator of Manuscripts*. B.A., Sweet Briar College; M.A., College of William and Mary.

SUZANNE LOUISE FOLEY (1967, 1965), *Reference Librarian*. A.B., College of William and Mary; M.L.S., Rutgers University.

HERBERT LAWRENCE GANTER (1950, 1940, 1948), *College Archivist*. A.B. and B.C.L., College of William and Mary.

SARAH VIRGINIA GRAY (1964, 1964), *Periodicals Librarian*. A.B., Duke University; M.S. in L.S., University of North Carolina.

HENRY DALE GRUNDER (1967, 1967), *Curator of Rare Books*. B.A. and M.A., Miami University; A.M., University of Chicago.

BERNA JUDITH HEYMAN (1972, 1972), *Assistant Catalog Librarian*. A.B., Washington University; M.S.L.S., Simmons College.

LEAH RAE MIRON (1972, 1972), *Assistant Catalog Librarian*. B.A., Rice University; M.A., University of Denver.

DORTHA HENDERSON SKELTON (1971, 1971), *Assistant Reference Librarian*. B.A., University of Tennessee; M.S.L.S., Atlanta University.

ROBERT C. STEVICK (1971, 1971), *Assistant Reference Librarian*. B.S., Washington and Jefferson College; M.L.S., University of Pittsburgh.

GRACE SWIFT (1970, 1970), *Librarian*, Virginia Associated Research Campus. A.B., College of William and Mary; A.M.L.S., University of Michigan.

NOLAN THOMAS YELICH (1968, 1968), *Head Public Services*. B.S., Wisconsin State University, Oshkosh; M.S., University of Wisconsin.

AILENE ANNE ZIRKLE (1964, 1963), *Acquisitions Librarian*. A.B., Madison College; M.L.S., George Peabody College for Teachers.

Health Service Staff

Richard D. Cilley, M.D. (1973, 1973)	Director of Student Health Services
B.S., Tufts University	
M.D., Boston University	
Franklin A. Munsey, M.D. (1973, 1973)	Assistant Director of Student Health Services
A.B. Dartmouth College	
M.D. Boston University	
Mrs. Bettye Bracey, R.N.	Head Nurse
Mrs. Isabelle S. Gray, R.N.	Staff Nurse
Mrs. Margaret Edmunds, R.N.	Staff Nurse
Mrs. Charlotte R. Bathurst, R.N.	Staff Nurse
Mrs. Gloria Birringer, R.N.	Staff Nurse
Mrs. Carol A. Gleason, R.N.	Staff Nurse
Mrs. Lois Byrd	Medical Secretary
Mrs. Shelby Haynes	Clerk-Receptionist



II. STUDENT AFFAIRS

STUDENT LIFE

William and Mary, as a small, liberal, and modern university, emphasizes the development of the student as a whole individual, in an environment in which faculty, students, and administrators work closely together.

The achievement of the educational purposes of the College is a responsibility shared by all elements of the College community. While the Board of Visitors, the President, and the administrative officers bear the ultimate responsibility and authority, a direct responsibility rests also on students and faculty to maintain on the campus, in the classrooms, and in the residence halls, the environment necessary for the pursuit of scholarly activities, the protection of the rights of others, and the assurance of the opportunity for personal growth and development. In the formulation and administration of rules of conduct students express their responsibility by participation in Student Government, in Residence Hall Councils, in the Discipline Committee, and in the Honor Council.

As citizens, students enjoy the same rights and responsibilities as those outside the College community. The College considers the observance of public laws of equal importance with the observance of its own regulations.

Regulations governing conduct and student life have been promulgated and published in the handbook entitled, *Student Life Policies*, copies of which are made available to all applicants for admission to the College and which are incorporated by reference as an integral part of this catalogue.

RESIDENCE

All freshman and sophomore students under 21 years of age, except those who commute daily from their homes (the homes of their parents or legal guardians), are required to live in College housing. The residence halls are not open for occupancy during Thanksgiving, Christmas, and Spring recess periods, and unclassified students and those carrying a part-time program of studies are not eligible for accommodations in College residences.

Students in residence halls exercise responsibility and self-governance through the Residence Hall Council. An electronic card-key security system is employed in each residence and each student has self-determination as to his or her freedom of movement in and out of his or her residence hall and self-determination as to the hours of such movement.

All resident undergraduate students who are classified as freshmen, unless they have attended college for two semesters, are required to board in the College dining hall. For all other students, boarding in the dining hall is optional.

The physical facilities of the College provide an opportunity for a number of different residential experiences. While the majority of William and Mary students live in the College's 15 residence halls, other facilities include an apartment complex, nine sorority houses, twelve fraternity houses, French, German and Spanish Language Houses (see page 121), and Project PLUS, an academic and residential program accommodating 84 students. Trained staff members are provided for each of the residences.

PROJECT PLUS—One of the main purposes of Project PLUS is to promote the integration of residential and academic aspects of the college experience. Each of the 84 resident students takes part of his academic work in courses taught within the building. Eligible to apply are all rising sophomores, juniors and seniors who exhibit in their applications a commitment and an ability to contribute to the Program as well as good academic standing. Applications are invited beginning February 1st of the preceding session; the deadline is March 1st. Participation in Project PLUS is normally limited to one year. For further information see page 59 and page 135. A brochure is available on request from the Director of Honors and Experimental Programs.

STUDENT LIFE

PUBLIC PERFORMANCES

No person or group of persons shall either in Williamsburg or elsewhere represent the College in a public performance of any kind unless prior approval is obtained from the Office of the Dean of Students.

POSSESSION AND USE OF MOTOR VEHICLES

Students who have not completed the equivalent of four full semesters may not maintain automobiles on the College campus or in Williamsburg. This regulation does not apply to graduate or day students commuting from their homes or to students age 21 or over. Exceptions to the regulation may be made only for essential employment, physical disability, or for other essential college-related needs. This special permission is to be secured from the Dean of Students. A student who brings an automobile to the campus without prior written approval, in anticipation of obtaining special permission, is in violation of this regulation.

College regulations require that all motor vehicles operated on the campus, including motorcycles, be registered by the third day of classes.

The Motor Vehicle Control Board administers regulations governing registration of vehicles and parking and traffic on the College campus. The regulations, procedures, and penalties of the Board are set forth in the Motor Vehicle Regulations pamphlet available at the Office of the Dean of Students and the Campus Security Office.

EXTRACURRICULAR ACTIVITIES

There are several broad areas of student life and activities outside the formal academic program which, together with that program, comprise the whole educational experience of a student at the College of William and Mary. These general areas are the cultural, the social, the spiritual, and the athletic, ranging in specific activities from student government, publications, theatre, and musical groups, to participation in intercollegiate and intramural athletics. The College recognizes and encourages these many activities as valuable elements in the student's life and lends support to them through the Office of the Director of Student Activities.

Since William and Mary is chiefly a resident college, students and faculty compose a closely knit community in which extracurricular and social activities play a considerable role in the cultural and intellectual development of the individual. An informal relationship between teacher and student is encouraged, both in and out of the classroom, thereby fostering the process of living and learning together. The College is concerned to keep classes small and to ensure the possibilities of both a friendly, informal faculty-student association, and a rewarding, non-academic life whereby the individual's needs, interests, and identity are honored in a democratic way. The College believes that one of the major purposes is to inculcate by means of the several phases of college life the ideals of self-responsibility and good campus citizenship.

ORIENTATION

The new student at William and Mary is introduced to the College life and atmosphere during the orientation period which takes place immediately before the beginning of classes in each semester. During this period he is introduced to student leaders and to key members of the administrative staff and he is made familiar with the College facilities, the complete range of extracurricular activities, and the Honor System. An important part of the orientation period is the consultation which occurs between the entering student and his faculty advisor. The advisor works closely with the student before registration and occasionally during the school year to assist him in developing an academic program suitable to his interests and needs and consistent with the requirements of the College.

STUDENT LIFE

THE HONOR SYSTEM

Of primary importance to the life of the students is the College's student-administered plan of discipline known as the Honor System. Through an elected council of student members, the Honor System applies to the specific areas of lying, stealing, and cheating. The essence of the System is individual responsibility in all matters involving the student's honor, and the Honor System assumes that every student is concerned with the strict observance of the principles of honorable conduct which he upon matriculation pledges to uphold, for his own sake, for the sake of his fellow students, and for the College.

STUDENT GOVERNMENT

Undergraduate student government is vested in the Student Association of the College of William and Mary composed of Executive, Legislative, and Judicial branches. In addition, a separate organization, The Women's Dormitory Association, deals with some of the residence hall activities of the women students.

The students of William and Mary also exercise self-governance through the Residence Hall Councils, organizations composed of elected officers of each residence and responsible for the social and recreational activities of the building, the maintenance and enhancement of an appropriate environment in the residence hall and the administering and enforcing of rules and regulations established by the residents.

THE BOARD OF STUDENT AFFAIRS

The Board of Student Affairs consists of representatives of the student body, faculty, and administration. The 23 member body has full power to investigate any area of the College pertaining to student concerns and presents its opinions in the form of recommendations to the appropriate authorities. In addition, the Board has final authority over the allocation of the Student Activities Fee.

PHI BETA KAPPA SOCIETY

Alpha of Virginia: The Phi Beta Kappa Society, the oldest Greek-letter fraternity in the United States, was founded by a small group of students at the College of William and Mary on December 5, 1776. During the succeeding four years, the number of members increased to a total of fifty, including Captain John Marshall, who subsequently became Chief Justice of the United States, and Elisha Parmele, a graduate of Harvard University. The faith of these youthful scholars in the permanence and future greatness of their society was shown by their preparation of charters for branches in other colleges. Two such charters were entrusted to Elisha Parmele, who brought about the establishment of chapters at Yale in 1780 and at Harvard in 1781.

The original society at the College became inactive in 1781, with the closing of the College because of the approach of the army of Cornwallis. It was revived in 1851 with the blessings of an aged founder, William Short, and continued until early in the War Between the States. In 1893 the Alpha of Virginia Chapter was revived once again, and it has continued since that time as an active and significant element in the educational program of the College.

At present there are approximately 170 chapters of Phi Beta Kappa located at the leading educational institutions of the United States, with a membership in excess of 120,000. Members of the local chapter number more than 1,000 persons; in addition, a number of faculty members who were elected to Phi Beta Kappa at other institutions serve actively as affiliated members of Alpha of Virginia. Senior students up to 10 per cent of the total number in the class are elected each year, largely on the basis of scholarship, as members in course. From the alumni of the College of at least ten years' standing who have attained distinction in their professions, Alumni members are elected from time to time. Less frequently, honorary members and faculty members who are not graduates of the College are elected to membership.

STUDENT LIFE

HONOR SOCIETIES

Omicron Delta Kappa is an honorary fraternity comprised of junior and senior men selected on the basis of scholarship, service, and leadership in the various areas of college life.

Mortar Board is a woman's honorary society whose members are elected in their junior year on the three-fold basis of service, scholarship, and leadership.

Two national honor societies, Phi Eta Sigma for men and Alpha Lambda Delta for women, annually select for membership those freshmen who have attained academic distinction.

There are eight honorary societies devoted to furthering interest in special fields of learning. Members of these groups are elected on the basis of scholastic proficiency in the departments concerned. In addition, many students find opportunities for friendly and stimulating associations in the various special interest groups and departmental clubs devoted to such fields as literature, philosophy, drama, debating and the several fields of science.

SOCIAL LIFE AND ORGANIZATIONS

A varied social life is available to William and Mary students through the many functions and activities sponsored at the College. Most residence halls provide recreation rooms, study rooms, and lounges and sponsor social programs for the residents. As the meeting place of students on the campus, the Campus Center offers an educational and recreational program of events for the College community as well as opportunities for student participation in the presentation of that program. The facilities of the Center include lounges for informal gatherings, a television room, music listening rooms with stereophonic equipment, and a small cafeteria, "The Wigwam". Billiards, table tennis, and board games are also available. In addition, there are meeting rooms to house various interest groups and clubs, as well as a ballroom and theatre. The offices of the various student publications and Student Association are located in the Center. A film series, lecture series, and craft exhibits, and concerts are presented as a part of the regular Center program.

Since the first Greek letter fraternity was founded at William and Mary in 1776, the College has had an unparalleled heritage as a background for its fraternity life. Today, the fraternities serve their members by providing an outlet for social expression, competitive athletics, and service to the College and community. The College-owned fraternity houses accommodate 33 men each under the status of a "small residence hall". There are chapters of twelve national fraternities on the campus: Kappa Alpha, Kappa Sigma, Lambda Chi Alpha, Phi Kappa Tau, Pi Kappa Alpha, Pi Lambda Phi, Sigma Alpha Epsilon, Sigma Chi, Sigma Nu, Sigma Phi Epsilon, Sigma Pi, Theta Delta Chi. Self-government within the fraternity system is encouraged through the efforts of an Interfraternity Council.

There are nine chapters of national sororities at the College: Alpha Chi Omega, Chi Omega, Delta Delta Delta, Gamma Phi Beta, Kappa Alpha Theta, Kappa Delta, Kappa Kappa Gamma, Phi Mu, Pi Beta Phi. The affairs of the sororities are administered and regulated by a chapter of the National Panhellenic Council. The sorority houses are owned by the College and each accommodates between 15 and 20 women, usually seniors, under the College status of a "small residence hall." Each sorority carries out its respective national principles in the general realms of social congeniality, moral and mental standards, development of leadership, cooperation and service, and provides support for local and national philanthropy.

PUBLICATIONS

The Flat Hat is a weekly newspaper, edited and written by students, which reports, analyzes, and provides commentary on campus life.

The Gargoyle is a student-edited humor magazine published twice yearly.

STUDENT LIFE

The *William and Mary Review* is published twice a year by a body of student editors. As the College literary publication, it contains short stories, essays, poems, and reviews.

The *Colonial Echo*, the College yearbook, is published annually by a student staff and serves as an illustrated chronicle of campus life.

The financial administration and the selection of the major editorial positions of the publications is accomplished by the Publications Council, a group consisting of students, faculty, administrators, and community representatives.

THE WILLIAM AND MARY THEATRE

Now in its forty-eighth year, the William and Mary Theatre is a significant contribution to students as members of the audience or as the participants. The staff is composed of five professionally trained members of the faculty of Theatre and Speech. Participation in all forms of dramatic work is provided to students through courses in the Department of Theatre and Speech and through extra-curricular activity. Tryouts for parts in plays are open to all students, and casting is based on a competitive process with the intent to assemble the best qualified people for public performances. The production crews are basically composed of members of the classes in stagecraft, lighting, and design and costume, but emphasis is also placed on the opportunity for all students to volunteer to serve on committees of set construction, painting, sewing, making of properties, publicity, ushering, and box office management. Every production is a learning process for everyone participating.

Annually four full-length plays are presented in public performances. The plays are carefully chosen to provide a variety of entertainment, dramatic experience, and cultural value. Among the plays recently produce are: *Twelfth Night*, *Dark Mirrors and Bright Windows*, *Man of la Mancha*, *The Rainbow Sign*, *You Can't Take It With You*, *The Trial of the Catonsville Nine*, *Ernest in Love*, *The Miser*, *Antony and Cleopatra*, *A Cry of Players*, *Brigadoon* and *The Trojan Woman*.

Production methods and styles vary from the proscenium and picture-frame stage to open staging and theatres-in-the-round. Directors' Workshop and Premiere Theatre offer excellent opportunities for students to participate in theatre.

A chapter of a national honorary fraternity is made up of members elected from students who became eligible through successful work in the College theatre.

THE WILLIAM AND MARY DEBATERS

The Intercollegiate Debate Council is an organization training students for participation in college debate tournaments. Any student interested in debate is welcome to join the Council.

Under the guidance of the faculty Director of Forensics and the Department of Theatre and Speech, an extensive program of tournament participation is carried on. Each year debaters from the College enter about thirty debate tournaments. Debaters in recent years have traveled to tournaments at New York University, Dartmouth College, Georgetown University, University of Georgia, Kansas State University, Northwestern University, Illinois State University, and many other eastern colleges.

The College of William and Mary is affiliated with Delta Sigma Rho-Tau Kappa Alpha national honorary forensic fraternity. Outstanding college debaters may qualify for membership.

Locally, the College Debaters endeavor to present programs of interest to the college community. In recent years debaters from England, Ireland and other American universities have appeared before audiences. William and Mary debaters are frequently invited to appear similarly at other universities. William and Mary debaters have frequently hosted high school debaters and are often asked to help judge Virginia High School League debate tournaments. William and Mary is also a member of the Virginia Forensic Association, an organization of Virginia colleges and universities.

STUDENT LIFE

The Marshall-Wythe Debate Tournament is in its second decade. This event, held in late January, brings to the campus teams from fifty colleges and universities from all parts of the United States. The tournament is recognized as one of the outstanding meets in the nation, offering both a unique setting and high quality debating. It has been selected as one of twenty qualifying events for the annual Tournament of Champions.

The debate program is coordinated with the Department of Theatre and Speech, making use of course offerings and faculty aid. Its goal is to provide means for honest, intelligent and competitive advocacy. The activity is open to any student interested in the knowledge, skills and pleasures that come from intercollegiate debate.

LECTURES, CONCERTS, AND EXHIBITIONS

The cultural life at William and Mary is rich and varied. Under the auspices of the Committees on Concerts and Lectures, the College seeks to provide its students opportunities for enjoying a wide range of public lectures and concerts.

As a charter member of The University Center in Virginia, Inc., the College participates in a cooperative Visiting Scholars Program which annually brings to the campus for public lectures, readings and seminars, a great many distinguished scholars in all fields of learning, renowned authors and artists, and leading figures in public life. Additional public lectures are sponsored by the Committee in cooperation with various departments of the College and the Student Committee on Concerts and Lectures. Prominent guests are also brought to the college by the College-wide Reading Program.

The William and Mary Concert Series annually offers to students, faculty, and area residents, on a voluntary subscription basis, four or five performances by outstanding artists of the professional concert stage. In recent years College audiences have enjoyed performances by Abraham Kaplan and the Camerata Singers; The Orchestra de Paris; Julian Bream, guitarist and lutenist; Raymond Lewenthal, eminent pianist; Pennsylvania Ballet Company; and the Guarneri String Quartet.

Under the sponsorship of the Fine Arts Department and the Campus Center traveling and purchasing exhibits in painting, sculpture, and architectural design, theatre and industrial arts are shown throughout each year. The final exhibition annually is devoted to the work of students in the Fine Arts classes. Once each year the Virginia Museum of Fine Arts presents a showing of original art on the campus by means of an artmobile.

COLLEGE-WIDE READING PROGRAM

The College-Wide Reading Program is an attempt to foster a sense of community within the College that cuts across disciplinary lines. Each year, the Program selects a theme of current interest around which a list of readings, discussion groups, and outsider speakers is built. The Program also sponsors two weekend retreats a year, one each semester, which bring together faculty, students, and administrators to discuss problems related to the year's theme. Participation in the Program and its activities is open to all.

MUSICAL ACTIVITIES

The College offers many musical opportunities to the student for pleasure, participation, and cultural enrichment. The student may choose to attend a wide variety of performances of unusual interest selected from the William and Mary Concert Series, faculty and student recitals, and the Collegium Musicum Series. Participation in the College Choir, Chorus, Band, Orchestra, and small vocal and instrumental ensembles is possible for interested and qualified students. The Campus Center and College Library provide facilities for record listening. Faculty and students of the Music Department participate in the William and Mary Theatre presentations of musical productions. Each year the men's and women's music fraternities, Phi Mu Alpha Sin-

STUDENT LIFE

fonia and Delta Omicron form an opera company and mount a production of a Gilbert and Sullivan operetta.

The Collegium Musicum Series, sponsored by the Department of Music and open to the College and community without charge, presents programs of special interest. Included in past seasons have been English Consort of Viols; Harold Schonberg, Music Critic of *The New York Times*; Kimio Eto, Koto; Grainne Yeats, Irish Harpist and Singer; Gerald Moore, world reknown Accompanist; Vladimir Ussachevsky, Composer of Electronic Music; Karl Wolfram, Lutenist-Singer; Carl Dolmetsch, Recorder; Edward Kilenyi, Piano; Takako Nishizaki, Violin.

The William and Mary Choir, a select and mixed group, sings choral literature carefully chosen from among the best available sources. Formal concerts on campus, in the community, and on tour are part of the annual Choir agenda. The William and Mary Chorus, which is a group of women students of the College, provides music for various events on the campus and also appears in formal concerts.

The College Band serves as a dual organization during the academic year. For the football season, the Band performs as a marching unit, and is highlighted in pre-game and half-time shows, pep rallies, and parades, appearing at both home and away games. After the football season, the Band functions as a concert organization, presenting formal and informal concerts on campus and on tour.

The William and Mary College-Community Orchestra is an organization devoted to the study and performance of the best in orchestral music. The organization consists of a Chamber Orchestra, and smaller ensembles made up from the more advanced players of the orchestra. In addition to the annual spring concert the members are active in many special performances in the community.

Private instruction is available for interested and qualified students in piano, organ, voice, strings, and winds. The Music Department sponsors student recitals each year in which advanced students are afforded the opportunity and experience of public performance.

TELEVISION AND RADIO

The College operates a campus-limited, closed-circuit television facility and a non-commercial, FM radio station, WCWM. Radio and Television have a two-fold purpose at William and Mary: the presentation of formal instruction and general information through these media, and curricular instruction of students in the practical application of broadcast principles.

All students are eligible for participation in the activities of WCWM, which is operated by student volunteers on an extracurricular basis. Opportunities are available in all phases of radio programming. Students also serve as crew for closed-circuit television productions through the Work-Study Program.

MEN'S ATHLETICS

In William and Mary Hall, the men's gymnasium, are two auxiliary gymnasiums, a gymnastics room, a wrestling room, a weight room and training room as well as the main floor which is used for intercollegiate athletic events. The building seats 10,700 for basketball events and houses offices for the entire physical education department faculty and athletic department staff.

In the George Preston Blow Gymnasium are two basketball courts, a swimming pool, two handball courts, volleyball courts, showers, lockers, athletic administrative offices, a trophy room, and a social room. Cary Field provides for the following facilities: tennis courts, baseball field, stadium for football, track, and field athletics (seating capacity 15,000), practice fields for varsity and freshmen football, and space for softball and intramural games.

The intramural sports program which is under the direct auspices of the Men's Department of Physical Education is designed to meet the needs and desires of all students as far as it is financially and educationally possible. The program evolves from

STUDENT LIFE

the expressed desires of the students. The intramural director and other staff members of the Physical Education Department act primarily in organizational and advisory capacities.

Provision is made for participation in the following individual and team activities: badminton, basketball, bowling, free throws, golf, handball, horseshoes, softball, swimming, tennis, touch football, track and field, volleyball, and wrestling. League schedules and individual tournaments are arranged for dormitory, fraternity, and independent competition.

The general supervision of intercollegiate athletics for men has been delegated by the President to a faculty committee. The College is a member of the Southern Conference, the ECAC and the NCAA. Bernard L. Carnevale is the Director of Men's Athletics, and Edmund T. Derringer is the Business Manager.

Varsity intercollegiate teams, under the supervision of a competent staff of coaches who are appointed for the full academic years, are offered the following sports: baseball, basketball, cross country, fencing, lacrosse, football, golf, gymnastics, rifle, soccer, indoor track, swimming, tennis, wrestling and track and field. Freshmen are eligible for varsity competition in all sports.

WOMEN'S ATHLETICS

Sports are conducted and supervised by a joint committee of faculty and students. The program of physical education activities for women provides opportunity for intramural competition, interest groups, and participation in intercollegiate activities in hockey, golf, swimming, fencing, basketball, tennis, track and field, volleyball, and lacrosse.

Provision is made for intramural participation in the following activities: badminton, basketball, bowling, bridge, flag football, hockey, softball, swimming, tennis, track and field and volleyball. Schedules are arranged for dormitory, sorority, and individual competition in groups or teams according to the ability of the participant. Tryouts are held each year for membership in Mermettes, the synchronized swimming club, and Orchesis, the dance club.

The *Cornelia Storrs Adair* Gymnasium provides facilities for fencing, badminton, gymnastics, volleyball, and basketball. The swimming pool and dance studio are located in this building.

The women's athletic fields provide ample space for outdoor activities including archery, golf, hockey, lacrosse, softball and tennis.



STUDENT PERSONNEL SERVICES

OFFICE OF THE DEAN OF STUDENTS

The Dean of Students and his staff provide a broad range of services to the students of the College. The Office has primary responsibility and concern for general student counseling, student rights and responsibilities, organizations and activities, student government, discipline, the Campus Center, and student residences. The Deans work closely with the members of the Faculty and Administration of the College to represent student concerns to them as well as to represent academic and administrative policies to the students.

THE DEAN OF STUDENTS administers and coordinates the Student Affairs program and provides general counseling services to upperclass students.

THE ASSOCIATE DEAN OF STUDENTS FOR ADMINISTRATION develops and administers special programs, workshops, and retreats, provides special counseling programs for day students, handicapped students and other special groups of students, coordinates staff publications and provides basic administrative assistance to the Dean of Students.

THE ASSOCIATE DEAN OF STUDENTS FOR STUDENT DEVELOPMENT provides general group and personal counseling services to freshmen and transfer students, develops programs for new students which will assist their adjustment to college and their involvement in its programs, directs the orientation activities of the College, administers the College's social regulations and provides service and advice to its judicial organizations.

THE ASSOCIATE DEAN OF STUDENTS FOR RESIDENCE HALL LIFE assigns students to rooms in the College's residences, selects, trains and supervises the residence hall staff, plans and implements programs and activities in the residences, organizes and assists the Residence Hall Councils, and provides general services in facilities planning and the development of policies which pertain to the residence halls.

THE ASSOCIATE DEAN OF STUDENTS FOR CAREER PLANNING provides personal and group counseling services in the area of goal assessment, career decision-making and vocational preparation, and supports these activities with a testing program and a resource center which offers current information on careers, preparation for careers, and manpower projections.

THE DIRECTOR OF THE CAMPUS CENTER coordinates the activities of the Campus Center to achieve the Center's objective of social education and service to the College community.

THE ASSOCIATE DIRECTOR OF THE CAMPUS CENTER AND DIRECTOR OF STUDENT ACTIVITIES provides special services and advice to the student activities and organizations of the College (including its social organizations), maintains the College's activities calendar and assists in the planning and implementations of the Campus Center program.

STUDENT HEALTH SERVICES

The objective of the Health Services is threefold: (1) Improvement of the health of the students, (2) prevention or treatment of diseases, and (3) instruction of students in matters essential to healthful living.

The Health Service is housed in the new Student Health Center, a modern, fire-proof building containing out-patient clinic, dispensary and waiting room, kitchen, and eighteen bed in-patient facility.

A personal health history and complete physical examination form is required of all entering students. During each semester, each student who has (1) paid his or her health service fee, (which is included under "general fees") and (2) who has filed his or her completed Health Form with the Director is entitled to the use of the Health Service facilities. Undergraduates who are carrying at least 12 credits and graduate

STUDENT PERSONNEL SERVICES

students carrying at least 9 credits are eligible by virtue of having been charged the Health Service fee under the aforementioned "general fees". The medical services are as follows:

1. Medical care in the Health Service Clinic for most illnesses and accidents. Necessary drugs and dressings are included as much as possible.
2. Health consultation service with the medical staff during those days that school is formally in session.
3. Special medical examinations for certification for participation in intercollegiate athletics and other forms of strenuous activity sponsored by the school.
4. Hospitalization in the Health Service Center for a limited period for illness when advised by one of the college physicians. The college does not, however, assume the cost of special care nurses, consulting physicians where needed (including psychiatric care), surgical operations, X-rays, and any laboratory procedures that cannot be done directly through the Health Service facilities. Also, care in other hospitals and certain special medications that are not stocked in the Health Service pharmacy are the responsibility of the student or his family or his or her supplementary insurance coverage. Meals while in the infirmary are charged to the student at the prevailing dining hall rate.
5. A special, low-rate group insurance to help cover some of the cost of these "extra-Health Service" costs is available through the Treasurer-Auditor's office.

The College Health Service provides the services listed above, but it lacks facilities for prolonged or specialized care. It can offer some post-operative care at the discretion of the operating surgeon and where it is to the advantage of the student financially and academically. Students who have legitimate medical reasons will be permitted to withdraw from the College for those reasons without prejudice to their academic records.

Also, all relationships between student and physicians are confidential, and at no time do the results of diagnosis and treatment become part of a student's permanent college record. No information concerning an individual's contact with the Health Service will be released without his or her written permission. At the same time, we would encourage a free interchange of information between the physician and the student in both directions on any matter regarding his or her health.

OFFICE OF CORPORATE RELATIONS AND PLACEMENT

The College maintains an Office of Corporate Relations and Placement for students and alumni through which non-teaching placement and career planning information may be obtained. Seniors are assisted in obtaining employment with business and industrial organizations and with governmental agencies. These same services are extended to alumni who are seeking to secure new employment. Educational placement opportunities are handled by the Teacher Placement Office in the School of Education. An office of placement for law graduates is located in the Marshall-Wythe School of Law.

Placement files are developed for seniors and are maintained for several years after graduation. Alumni may refer employers to these files at any time. Company representatives are invited to the campus to confer with seniors and to discuss not only the qualifications necessary for success in their special fields, but to explain business opportunities and to make job offers to graduates.

The Office of Corporate Relations and Placement maintains cordial relationships with many employers. Representatives of these employers are given every assistance in their recruiting programs.

THE CENTER FOR PSYCHOLOGICAL SERVICES

The Center for Psychological Services, located in the basement of Rogers Hall offers professional assistance to students in two areas.

STUDENT PERSONNEL SERVICES

The major function of the Center is to provide personal counseling and help in solving problems of social relationships and the understanding of oneself and others. These services are free of charge, and are provided by experienced clinical psychologists who are members of the faculty. All relationships between clients and counselors are confidential, and at no time do the results of counseling become part of a student's permanent college record. No information concerning an individual's contact with the Center will be released without his written permission.

The second function of the Center is to provide vocational and educational counseling which generally involves aid in the selection of a major course of study or the planning of a career. Psychological services include the administration of vocational and psychological tests, when, in the judgment of the counselor, such instruments can make a meaningful contribution to the understanding or resolution of a student's concerns. In addition to testing that is part of the counseling process, the Center serves as a regional testing center for certain nationally administered examinations. Among these are the Graduate Record Examinations, the Law School Admission Test, the Medical College Admission Test, the Miller Analogies Test, and the Graduate School Foreign Language Test. Application forms and additional information concerning these examinations can be obtained in Rogers 110.

In addition to counseling and testing activities, staff members of the Center for Psychological Services are available for consultation with faculty, administration, dormitory personnel, and students, either individually or in groups. Appointments for individual counseling or for consultation can be made in person or by telephone.



FINANCIAL ASSISTANCE AND ACADEMIC SCHOLARSHIPS FOR STUDENTS

FINANCIAL AWARDS FOR STUDENTS

The Office of Student Financial Aid administers two types of financial awards to students matriculating at the College of William and Mary: (a) financial assistance and, (b) academic scholarships. Complete information concerning financial aid is contained in the pamphlet, "How to Apply for Financial Aid." Requests for this information and all correspondence regarding financial awards should be addressed to:

Director
Office of Student Financial Aid
College of William and Mary
Williamsburg, Virginia 23185

FINANCIAL ASSISTANCE

Financial assistance is available to students who cannot otherwise meet the cost of an education at the College. Such assistance, when added to the contributions that can reasonably be expected from the student, his family, and any available outside sources, should enable him to meet the costs of attending William and Mary.

This assistance is awarded for one year only, but may be renewed annually if need continues and the student otherwise qualifies. Undergraduates qualify for financial aid on the basis of academic ability, willingness to obey the rules and regulations of the College, and demonstrated financial need.

Three forms of financial assistance are "packaged" to meet the need of a student—assistance grants (scholarships), loans, and part-time employment.

Transfer Students should adhere to the same application procedures as entering students.

Graduate Students may apply for assistance in the form of loans (subject to funds) and part-time work through the Student Aid Office. Scholarships, assistantships, and fellowships are awarded through the Office of the Dean of the School or Chairman of the Department in which the student intends to enroll.

Employment for Spouses of regularly enrolled students is also available as part of the College's overall financial assistance program. Inquiries concerning this type of employment should be directed to the College's Director of Personnel, rather than the Student Aid Office.

Demonstrated financial need is established through analysis of the applicant's "Parents' Confidential Statement" by the College Scholarship Service. Filing the PCS is the only action an entering student must take. The PCS may be obtained from high school guidance office, CSS, or the Student Aid Office. Resident students may secure applications from the Student Aid Office.

Deadlines for filing PCS with CSS for "Early Decision" applicants is November 1. For "Regular Admissions" applicants the deadline is February 15. For students in residence the deadline is April 15.

A brief description of the forms of financial assistance follows. Additional information may be found in the "Register of Scholarships and Fellowships of the College of William and Mary," copies of which may be consulted at the Student Aid Office and the Library.

Assistance Grants and scholarships are made possible through the generosity of friends and alumni of the College. A list of the benefactors of William and Mary who have established scholarships, assistance grants, loan funds, and awards is included at the end of this section.

Other assistance grant funds are made available through the Legislature to residents of the Commonwealth of Virginia. At the present time, *Federally Funded Programs* include the Educational Opportunity Grant, the National Direct Student Loan, State-Guaranteed Loan, and the College Work-Study Program. Replacement Programs are projected in the Nixon Administration budget.

FINANCIAL ASSISTANCE FOR STUDENTS

Part-Time Employment includes jobs at the College and in the city of Williamsburg. Colonial Williamsburg makes possible much part-time employment through the Student Aid Office. In order to maintain proper balance between hours of employment and academic loads, the College requires that all student employment on the campus or in the city be assigned by the Director of Student Aid. The normal work load is fifteen hours per week, with no student working more than twenty hours per week without permission from the Director.

ACADEMIC SCHOLARSHIPS

Merit Scholarships are awarded solely on the basis of academic achievement to the nineteen ranking scholars of the College and are not available to entering students.

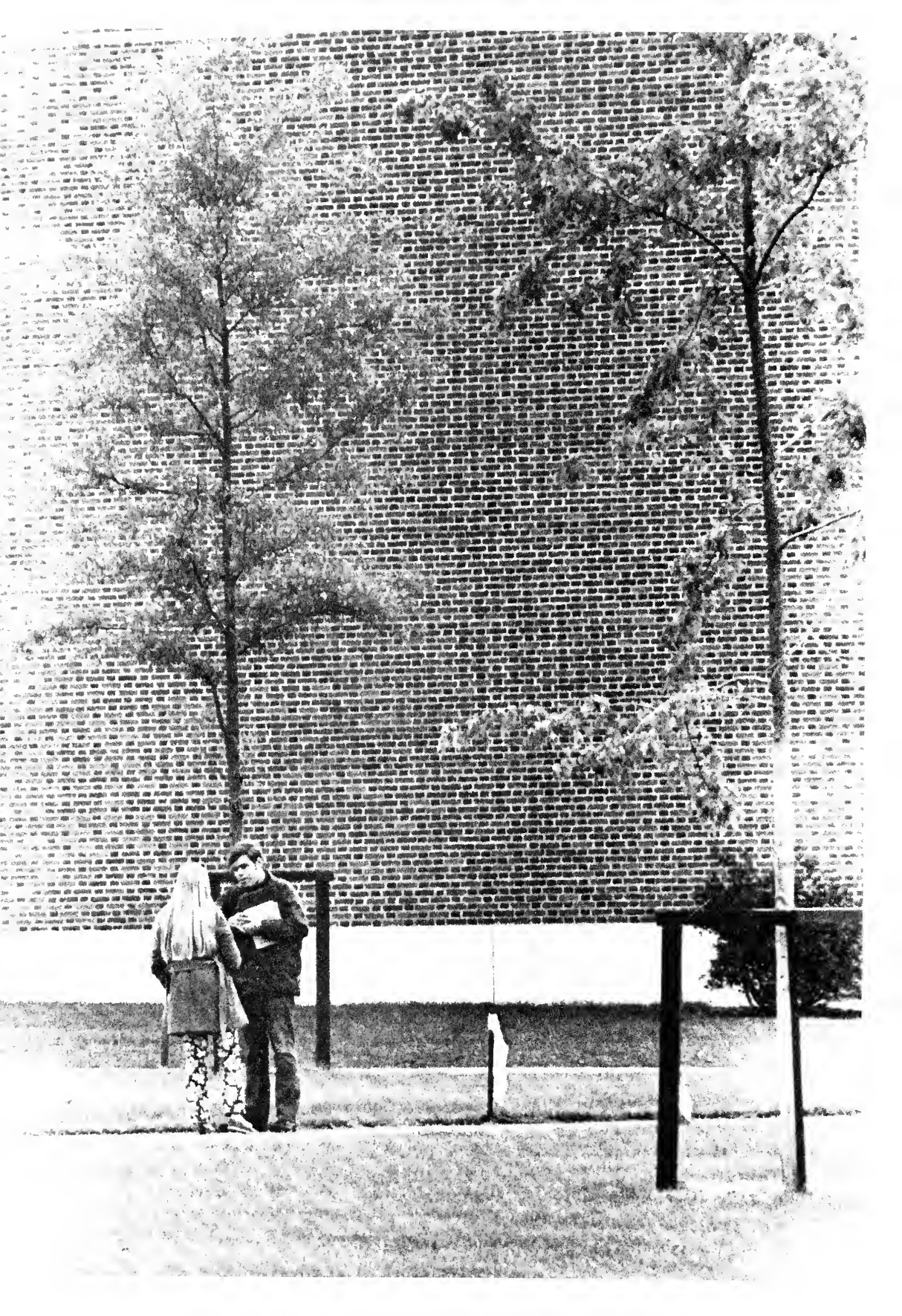
Teacher Training Scholarships are available to students who are residents of Virginia and plan to teach in the Virginia public schools. These scholarships are valued at \$450 per academic year. Address all inquiries on this program to Dean, School of Education, College of William and Mary, Williamsburg, Virginia 23185.

Foreign Exchange Scholarships include the University of Exeter and University of St. Andrews and the Drapers' Company awards. Each year two outstanding graduates of William and Mary will be selected by the College for a two-year period of study at Oxford, Cambridge, or another British university. This opportunity is made available by agreement between William and Mary and the Drapers' Company of London. In exchange one or two British students will be selected by the Drapers' Company for undergraduate study toward a bachelor's degree at the College of William and Mary. The cost of tuition and living expenses is provided for each student.

The College of William and Mary also has an agreement with Exeter University in England and the University of St. Andrews in Scotland for an annual exchange of students. Under this plan an outstanding William and Mary student is given the opportunity to study at one of the universities for one year. One student will be selected for each university. The Exeter scholarship is open to students who are rising juniors or who are members of the graduating class; the St. Andrews is available only to rising juniors. All college fees (tuition, registrations, room and board) will be waived for these exchange students. They will live in one of the Residence Halls of Exeter or St. Andrews. One student from Exeter and one from St. Andrews will come to the College of William and Mary for the same period.

Special Scholarships are awards made by various departments within the College to students who demonstrate outstanding academic achievement during the year. These scholarships are not usually available to entering students.

Programs for Federal Beneficiaries are administered by the College for certain eligible students. These programs include Veterans' Educational Assistance, Children's Educational Assistance, Social Security Benefits for school children, and others. Persons who are qualified for such programs should work out the details with the appropriate Federal agency prior to registration at the College.



III. Academic Regulations and Requirements

ADMISSION TO THE COLLEGE

Within the limits of its facilities and its obligations as a state university, the College of William and Mary opens the possibility of admission to all qualified students without regard to sex, race, color, age, religion, or national origin.

UNDERGRADUATE ADMISSION

Students wishing to attend the College of William and Mary should obtain application forms from the Office of Admissions. Applications are due by February 1 for the fall semester and December 1 for the spring semester. All applications received on time will be given equal consideration; after these dates, they will be evaluated in terms of the admissions space situation at the time of application. No one will be admitted, either as a degree candidate or as an unclassified student, later than one week before registration.

FRESHMAN ADMISSION

Although all are invited to apply, the College must be selective due to the large number of applications received each year. In this process of selection, two important considerations are the potential benefit of the College to the student, and the student's potential contributions to the College community. Although a secondary school diploma is required, no specific program is prescribed as an absolute prerequisite for admission. However, the student's secondary education should serve as a preparation for the beginning course of study offered by the College and for a smooth adjustment to life in the College community. Successful William and Mary students have tended to perform well in pre-college years, both scholastically and on standard examinations. Many have wide-ranging interests; many others have intensely developed a single special interest or talent. Evidence of imagination, tenacity, good character, and intellectual curiosity are all considered indicators of promise in academic matters and satisfaction in the college experience. The College desires to incorporate into its community a wide variety of backgrounds, attitudes, and interests.

Tests of the College Entrance Examination Board

Freshman applicants are required to take the College Entrance examination Board Scholastic Aptitude Test and three Achievement Test, including the one in English composition. Students can meet the College's foreign language requirement either by completing four years of one foreign language in secondary school or by scoring 600 or above in the Achievement Test in a modern foreign language. Applicants intending to continue the foreign language begun in secondary school must take the reading Achievement Test in a foreign language. Students who have completed secondary school courses in Chemistry or Physics and who wish to be placed in advanced sections of these courses must take the achievement Tests in these areas. All College Entrance Examination Board tests should be taken no later than January of the final year in secondary school.

No minimum scores are required, as test results are always combined with other information for help in determining a student's academic potential, and for advising and placement. Information about these tests may be obtained from secondary schools or from the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540 or Box 1025, Berkeley, California 94701. The applicant should request that his scores be reported directly to the College.

Interviews

Interviews are not generally required by the Office of Admissions, and the lack of an interview will not affect a student's application. Visitors are welcome, however. Students and their parents may participate in a group information program, held

ADMISSION TO THE COLLEGE

through most of the year at 10:00 a.m. and at 2:30 p.m. weekdays, and at 10:00 a.m. on Saturdays. (During November, February, and March, peak months for application review, these sessions are not usually held weekday mornings. During June, July, and August, the Office of Admissions is closed on Saturdays.) Students who want to attend an orientation session should advise the receptionist in the Office of Admissions of the date and time they expect to be on campus.

Early Decision Plan

The College admits a limited number of freshman students under the Early Decision Plan. This plan is designed to ease the admissions process for students who are highly qualified and who are willing to commit themselves to an acceptance if admitted. Early decision applicants not selected under this plan will be considered along with other applicants for available spaces under the regular admission process.

Students wishing to be considered for Early Decision should take the Scholastic Aptitude Test before the beginning of the senior year and the Achievement Tests no later than January of the final year in secondary school. Before November 1 of the senior year, an application with letter of intent, secondary school record, and Scholastic Aptitude Test scores should be submitted. The Office of Admissions announces its decisions around December 1, and accepted students must signify their final intention to enroll in the College by paying a nonrefundable deposit by January 1.

Admission of Undergraduate Transfer Students

Transfer students are admitted for both the fall and the spring semesters. To be considered for admission, the applicant must have maintained at least a 1.5 grade point average on a 3.0 scale (2.5 on a 4.0 scale) in courses taken for credit in other institutions. All transfer students considered for admission to the College must be in academic and social good standing at their last institution or institutions. Transfer students are considered in relation to other applicants for the available spaces, in order to admit students with the strongest overall qualifications. Students who have completed fifteen or more semester hours of work at an accredited institution are not normally required to take the Scholastic Aptitude and Achievement Tests of the College Entrance Examination Board.

Admission to Unclassified Status

A student who does not intend to pursue a degree but wishes to take courses for credit during the day session may apply for admission as an Unclassified student. Students admitted to Unclassified status later wishing to become candidates for an undergraduate degree must submit a petition to the Office of Admissions before completing 30 semester hours, the maximum number applicable in this status. The minimum requirements for admission is the same as for those seeking degree status. A student once admitted as a degree candidate at the College is not eligible to be considered for admission as an Unclassified student. Students who wish to have Unclassified status should specify this in requesting application forms from the Office of Admissions.

Readmission

Students who are in good standing with the College but have not been in attendance in the day session for one or more semesters must submit an application for readmission and be readmitted by the Office of Admissions before they are permitted to register for classes in the day session.

Reinstatement

Students who are not in good standing with the College but who wish to seek readmission to the College of William and Mary or to transfer to another institution must

ADMISSION TO THE COLLEGE

submit a petition for reinstatement in good standing to the Chairman of the Committee on Academic Status.

Reinstatement in good standing and readmission are not automatic, but at the end of certain specified periods the student is eligible to seek these considerations from the Committee on Academic Status and the Office of Admissions respectively. A student who is asked to withdraw in February for academic deficiency may apply no earlier than April of the same year for reinstatement and for readmission to be effective in September. A student who is asked to withdraw in June or during the Summer Session may apply no earlier than November for reinstatement and for readmission effective in February. Applications should be made well in advance of registration for the fall and spring terms. For further information write to the Chairman of the Committee on Academic Status.

Notification of Decision

All applicants are considered in relation to each other. For this reason, all notification letters are sent at the same times; those interested in Early Decision will learn of the decision by the Office of Admissions around December 1; those wishing regular admission for the fall semester, around April 1; and those wishing to attend the spring semester, around December 15.

Delayed Enrollment for Admitted Freshmen

Students who are offered admission to the freshman class may postpone their enrollment for one year. Admitted freshmen who choose this option must submit a form requesting that their application be reopened by the following February 1 for the fall semester, or December 1 for the spring semester. These students will be guaranteed space if they satisfy previous requirements made as conditions of their original admission. They must have an honorable record in the intervening year. Assurance of future admission does not apply to students who enroll in a college or university during the intervening period; in such cases, it will be necessary to consider the student as a transfer applicant.

Admission to Audit Status

Students who wish to audit courses in the day session with no credit should contact the Office of the Dean of the Faculty of Arts and Sciences to obtain the appropriate forms for permission to audit.

Admission to the Evening College and Summer Sessions

Applicants should write to Director, Evening College and Summer Sessions for a catalog and application form. The admission to one of these divisions of the College does not entitle the student to admission to the regular day session or degree status unless an application is submitted and approved by the Office of Admissions.

UNDERGRADUATE ADMISSION TO THE SCHOOL OF BUSINESS ADMINISTRATION

Applicants must be admitted to the College prior to admission to the School of Business Administration. Application for admission to the School and its B.B.A. degree program is accepted the semester prior to the time the students expects to enroll in the School of Business Administration as a candidate for the B.B.A. degree but full admission will not occur until all requirements for admission are met.

ADMISSION TO THE COLLEGE

UNDERGRADUATE ADMISSION TO THE SCHOOL OF EDUCATION

Applicants must be admitted to the College prior to admission to the School of Education. Applications for undergraduate concentration are accepted the semester prior to the time the student expects to enroll in the School of Education as a concentrator. Final approval for admission will not be given until the student has attained junior standing in the College.

ADMISSION TO GRADUATE STUDY

For admission requirements for graduate and professional study consult the Graduate Catalog of the Faculty of Arts and Sciences and the School of Marine Science, and the Catalogs of the School of Business Administration, the School of Education, and the Marshall-Wythe School of Law.

Application forms for admission to graduate study under the Faculty of Arts and Sciences should be requested from the chairman of the department in which the applicant intends to do his major work, or for admission to the applied science program from the Director of the Graduate Program in Applied Science. Forms for admission to graduate study in the School of Education should be requested from the Director of Graduate Studies; to the Master of Business Administration; and to the law school from the Marshall-Wythe School of Law (Admissions). All of the above may be addressed at the College of William and Mary, Williamsburg, Virginia 23185.

Inquiries regarding the graduate program in marine science should be directed to the Dean of the School of Marine Science, Virginia Institute of Marine Science, Gloucester Point, Virginia 23062.



TUITION AND EXPENSES

THE COLLEGE RESERVES THE RIGHT TO MAKE, WITH THE APPROVAL OF THE PROPER AUTHORITIES, CHANGES IN TUITION AT ANY TIME

Payment of Accounts

Tuition, and room and board fees, and laundry are payable in advance by the semester, remittance being made by check drawn to the College of William and Mary.

Students will not be allowed to complete registration unless their registration cards have first been approved by the Treasurer-Auditor's Office. This preliminary procedure can be accomplished by mail and should be completed upon receipt of student's statement of account.

First semester accounts are due on or before September 5, or within 10 days after receipt of bill, if same is received after August 27. Second semester accounts are due on or before January 15.

Refunds to Students Withdrawing

Subject to the following regulations and exceptions, all charges made by the College for room, board and fees are considered to be fully earned upon the completion of registration by the student.

1. A student withdrawing within a period of five days after the scheduled registration period is entitled to a refund on charges except that \$25.00 shall be retained by the College to cover the expense of registration. (These refunds shall not include any deposits or advance payments that may have been required by the College as evidence of the student's intention to enroll.)

2. A student withdrawing at any time within the first 30 days after the scheduled period of registration shall be charged 25 per cent of all these charges: the semester's room rent, or the required deposit, whichever is greater, and laundry and tuition.

3. A student withdrawing at any time within the second 30 day period after the scheduled registration shall be charged 50 per cent of all of these charges: the semester's room rent, laundry and tuition.

4. A student withdrawing at any time after 60 days following the date of registration shall be charged the full semester's board, room rent, laundry and tuition.

5. No refunds of board, room, laundry and tuition will be made to a student who has been required to withdraw by the College regardless of the date of withdrawal.

6. Tuition, room rent, board and laundry are earned in full for unofficial withdrawals.

7. No refunds will be made on tuition for part-time students.

8. In cases of withdrawal during the first 60 days from College, charges for board will be calculated on a pro-rated basis determined by the date of official withdrawal provided the dining hall card is surrendered to the Treasurer-Auditor on this date.

Credits on Accounts of Scholarships Holders

Students holding scholarships are required to pay all fees less the value of the scholarship which they hold.

Withholding of Transcripts and Degrees in Case of Unpaid Accounts

Transcripts or any other information concerning scholastic records will not be released until college accounts are paid in full. Degrees will not be awarded to persons whose college accounts are not paid in full.

Cashing of Student Checks

The College does not have facilities for handling deposits for students' personal expenses but the Treasurer-Auditor's Office is prepared to cash checks up to \$25.00. All such checks should be made payable to the student or to cash. Under our regulations as a State institution, we are not permitted to cash checks made payable to the College of William and Mary.

TUITION AND EXPENSES

TUITION AND OTHER EXPENSES

Tuition (\$378.00 per semester for State Students and \$963.00 for Out-of-State Students) is a payment towards the general maintenance and operating costs of the College including recreational and health facilities. (Board, room and laundry are additional.)

The Act affecting residency is as follows:

"Be it enacted by the General Assembly of Virginia, That no person shall be entitled to the admission privileges, or the reduced tuition charges, or any other privileges accorded only to domiciliaries, residents or citizens of Virginia, in the State institutions of higher learning unless such person is and has been domiciled in Virginia for a period of at least one year prior to the commencement of the term, semester, or quarter for which any such privilege or reduced tuition charge is sought, provided that the governing boards of such institutions may set up additional requirements for admitting students."

A person who enrolls in any such institution while not domiciled in Virginia does not become entitled to admission privileges, or reduced tuition charges or any other privileges accorded only to domiciliaries, residents or citizens of Virginia by mere presence or residence in Virginia. In order to become so entitled, any such person must establish that, one year before the date of his alleged entitlement, he was at least eighteen years of age or, if under the age of eighteen, he was an emancipated minor, and he abandoned his old domicile and was present in Virginia with the unqualified intention of remaining permanently in Virginia after leaving such institution. The burden of establishing these matters by convincing evidence is on the person alleging them.

Notwithstanding marriage to a person who is not domiciled in Virginia, a person who is classified or classifiable at the date of his or her marriage as eligible to receive the privileges herein described, may receive or continue to receive such privileges until he or she abandons his or her Virginia domicile other than through any presumption of law attaching to the ceremony of marriage.

Laundry

The fee (\$20.00 per semester) covers the laundry requirements of the average student and is required of all students living in dormitories, sorority houses and fraternity houses.

Board

The College operates two cafeterias, together seating over 1300 persons. The dining halls are not operated for profit.

All students who are officially classified as freshmen ¹ and who are dormitory residents (including residents of the College-owned sorority and fraternity houses) will be charged for board at the rate of \$275.00 per student per semester. (Students entering for orientation, will be charged an additional \$12.00.)

Each student will be issued a Dining Hall Card which entitles that student to three meals daily for a period of approximately 120 days during the semester. The Christmas and Thanksgiving recesses during the first semester and the spring recess in the second semester are not included in the 120 days for which board is charged.

The Dining Hall Card will be usable in the Wigwam (Coffee Shop) on an announced basis.

It shall be optional with students not living in dormitories and students other than

¹ For boarding purposes "Freshmen" is interpreted to mean those students in their first year of residence in College.

TUITION AND EXPENSES

freshmen and sophomores whether they board in the College Dining Hall. They may elect to board by the semester in the Dining Hall in which case the charge for board will be \$275.00 per student per semester.

In cases of withdrawal during the first 60 days from the College, the student will be given a refund calculated on a pro-rata basis determined by the date of official withdrawal, provided the Dining Hall Card is surrendered to the Treasurer-Auditor on this date.

Owing to uncertain conditions prevailing with respect to the cost of food supplies and of food service, the College reserves the right to change its rates for board at any time throughout the year to meet such additional costs.

Room Rent

Room rent in the dormitories varies from \$210.00 to \$325.00 per semester depending on the size of the room, location, bath, etc.

The College dormitories are not open for occupancy during the Thanksgiving, Christmas, and Spring Recess periods.

Students Withdrawing from College Facilities: A student who continues enrollment in College, but who withdraws from College facilities at any time following the date of the semester registration, will receive no refund for the semester's room rent. This regulation will apply to all students regardless of the reasons for their withdrawal from College dormitory facilities.

ESTIMATE OF SEMESTER EXPENSES

	Low	Medium	High
Board	\$275.00	\$275.00	\$275.00
Tuition and General Fee (State Student) ¹	378.00	378.00	378.00
Room Rent	210.00	275.00	325.00
Laundry	20.00	22.00 ²	24.00 ²
Totals	\$883.00	\$950.00	\$1002.00

INCIDENTAL EXPENSES

It is impossible to estimate the exact cost to students of clothing, travel and incidental expenses. These are governed largely by the habits of the individual. The College endeavors to minimize temptation to extravagance. The size of Williamsburg aids materially in this matter by not subjecting the students to the diversions of a larger city. As the demands for extra money are small, parents are advised to furnish only a small sum.

The cost of books depends somewhat on the courses taken, but will seldom be less than \$125.00 a year and does not usually exceed \$175.00 a year.

Money for books cannot be included in checks covering college expenses; books should be paid for in cash or by separate check when purchased. Checks for books should be made payable to the William and Mary Bookstore.

NON-RECURRING FEES

Application fee	\$20.00
Room deposit	50.00
Room Damage Deposit	75.00
Room change fee	10.00
Diploma fee	10.00

¹ For out-of-State students add \$585.00

² For excess over and above normal requirement.

TUITION AND EXPENSES

Cap and gown rent, bachelor and master candidates	5.00
Cap and gown rent, doctoral candidates	6.00
Academic hood rent to Seniors and Graduate students	1.00

Application Fee—A non-refundable processing fee of \$20.00 is required with undergraduate freshmen and transfer applications for admission to the College. This fee is not credited to the student's account. Students applying for admission from Christopher Newport and Richard Bland Colleges are excluded from payment of this fee.

Room Deposit—A non-refundable deposit of \$50.00 is required by the College for a student to reserve a room. This payment is made to the Treasurer-Auditor and is applied on the student's regular college account.

This deposit may be made by students already enrolled at any time after the beginning of the second semester, but must be paid before March 8. No rooms will be reserved for students who have not paid their room deposit by the specified date.

Students enrolling for the first time may not make a room reservation deposit until they have been notified of their admission to the College.

Room Damage Deposit—This deposit is refundable upon leaving College housing, subject to assessments.

Room assignments for students will be made by the Associate Dean of Students for Residence Hall Life. Assignments will be made in order of priority of application.

Room Change Fee—Students are given two weeks to become settled in their rooms. Changes after this period will only be permitted after the payment of \$10.00.

Diplomas—The charge for diplomas for all degrees is \$10.00. This is payable one week or more before graduation.

Academic Costumes—Senior and Graduate students may procure caps and gowns from the College rental supplier just prior to graduation. Rental fee, payable to the supplier, is \$5.00 for bachelor and master candidates, 6.00 for doctoral candidates. Academic hoods will be provided to all degree recipients by the College just prior to graduation at a rental fee of \$1.00. All fees are payable upon receipt of the items mentioned.

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

THE College of William and Mary confers in course the following degrees, each under the jurisdiction of the Faculty or School indicated:

Faculty of Arts and Sciences: Bachelor of Arts (A.B.), Bachelor of Science (B.S.), Master of Arts (M.A.), Master of Science (M.S.), and Doctor of Philosophy (Ph.D.).

School of Business Administration: Bachelor of Business Administration (B.B.A.), and Master of Business Administration (M.B.A.).

School of Education: Master of Arts in Education (M.A.), Master of Education (M.Ed.), and Doctor of Education (Ed.D.).

School of Law: Juris Doctor (J.D.), and Master of Law and Taxation (L. & T.M.).

School of Marine Science: Master of Arts (M.A.), and Doctor of Philosophy (Ph.D.).

The requirements for the baccalaureate degree of Bachelor of Business Administration will be found on pages 169-171 of this catalog. The requirements for the postgraduate degrees are stated in the Graduate Catalog of the Faculty of Arts and Sciences or the Catalogs of the individual Schools.

DEGREES OF BACHELOR OF ARTS AND BACHELOR OF SCIENCE

The undergraduate degrees of Bachelor of Arts and Bachelor of Science are liberal arts degrees. A liberal education, although it has no single fixed definition, is more than a haphazard accumulation of courses. Its essential purpose is to liberate and broaden the mind, to produce men and women with vision and perspective as well as specific practical skills and knowledge. The major foundations on which a liberal education must be built are well-recognized. For these reasons, the College requires each undergraduate to plan, with the help of a faculty advisor and within the framework of broad general degree requirements, a total program of liberal education suited to his particular needs and interests.

The general degree requirements set forth below are designed to permit a high degree of flexibility for each student in planning his particular program of liberal education within broad basic limits. In this planning, a student and his advisor should build upon his previous preparation. A freshman should pursue at least one study in which he has interest and competence at the highest level his preparation allows. As early as possible he should explore some studies with which he is unfamiliar, in order to open up new interests and opportunities. Finally, he should take care to lay the foundations for his future specialization, in college or beyond in graduate or professional school, by anticipating specific prerequisites.

A liberal education presupposes certain *proficiencies*. Foremost among these is the ability to express one's self clearly both in speech and writing, for clear expression goes hand in hand with clear thinking. Another invaluable foundation of a liberal education is some experience with a foreign language, at least to the point where a student begins to see for himself the cultural as well as practical values of foreign language study. Since students entering college differ widely in their previous preparation in these respects, the proficiency requirements of the College establish only basic minimums; but each student is encouraged to proceed beyond these minimums to whatever extent his interests and abilities suggest.

In the *Freshman Colloquium*, the College offers every entering student an opportunity, in the context of a small class situation, to explore a challenging topic of special interest to him. He may choose a colloquium in a field in which he has already developed an interest and competence, or in an unfamiliar field about which he is curious. In either case he will participate closely in an exciting intellectual endeavor with his fellow students and a member of the faculty.

The *Area Requirements* are designed to ensure that every student will explore at least on an introductory level each of the broad areas of arts and sciences: the human-

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

ities, the social sciences, and the natural sciences and mathematics. In one of these areas every student will continue this exploration through the required sequence of two advanced courses building upon the two introductory ones.

Finally, in the area of his *Concentration*, every student is required to pursue in depth the exploration of a specific academic discipline or two or more related ones through an interdisciplinary concentration. Here he has the fullest possible opportunities for both independent study and work in a Departmental Honors program, as well as for regular course work.

Achievement of its educational purposes requires that the College maintain standards of scholarly achievement and an environment conducive to learning and that to this end it adopt necessary regulations governing academic performance. The Faculty of Arts and Sciences of the College determines the degree requirements for the A.B. and B.S. degrees, including the determination of the regulations governing academic standards, grading, and class attendance. Obligation to its educational mission gives to the College the right and responsibility, subject to the employment of fair procedures, to suspend, dismiss or deny continuance of a student whose academic achievement does not meet established College standards.

Requirements for degrees are stated in terms of "semester credits" which are based upon the satisfactory completion of courses of instruction. One semester credit is given for each class hour a week through a semester. Not less than two hours of laboratory work a week through a semester will be required for a semester credit. A semester is a term of approximately eighteen weeks or one-half of the college session.

Courses of the 100 series are primarily for freshmen, 200 for sophomores, 300 and 400 for juniors and seniors. Courses of the 500 and 600 series are intended for graduate students only. Odd numbered courses are ordinarily offered in the first semester but may be offered in the second semester also; even numbered courses are ordinarily offered in the second semester but may also be offered in the first semester.

A continuous course covers a field of closely related material and may not be entered at the beginning of the second semester without approval of the instructor.

No credit will be counted toward a degree for the first semester of an elementary foreign language unless followed by the successful completion of the second semester of that language.

REQUIREMENTS FOR THE DEGREES OF A.B. AND B.S.

A. GENERAL REQUIREMENTS

One hundred and twenty-four semester credits are required for graduation. Of these one hundred and twenty-four semester credits, one hundred and twenty must be in academic subjects and four in a program of activities in Physical Education. A minimum of 120 quality points in academic subjects is required.

The student must make a minimum quality point average of 1.0 for all courses in the field of concentration for which he receives an official grade. Grades of NC (no credit) shall be included in the computation of the 1.0 average in the field of concentration; the number of quality points earned must at least equal the number of semester credits attempted.

No degree will be granted by the College until the applicant has made a minimum of sixty semester credits in residence at the College in Williamsburg. This period must include the last two semesters in which credits counted toward the degree are earned.

A student must fulfill the general degree requirements set forth in the catalog at the date of entrance to the College, and he must fulfill the concentration requirements in effect when the choice of concentration is declared. A student who fails to graduate within six calendar years of the date of entrance to the College relinquishes the right to graduate under the requirements set forth in the catalog at the time of entrance,

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

and must fulfill the requirements in effect during the final session of his attendance at the College.

A student must complete the requirements for a degree within ten semesters of residence in College provided, however, that when a student has been permitted by the Committee on Academic Status to reduce his semester schedule below twelve academic credits, the total period of residence permitted for the completion of the degree requirements shall be extended in proportion to the reduction permitted. In the application of this requirement, attendance in Summer Session will be included. Such attendance will be counted on the basis of the ratio of the Summer Session course load to the normal program of the regular session.¹

B. PROFICIENCIES, AREA REQUIREMENTS, CONCENTRATION

The credits for a degree must be completed in accordance with the following specific requirements.²

1. Proficiencies

- A. *Foreign Language*: Unless a student presents at least four entrance credits in a single ancient or modern foreign language, or demonstrates equivalent proficiency by examination, he must satisfactorily complete a fourth semester course (or above) in a language in college.
- B. *Writing*: A student whose combined SAT Verbal and English Achievement scores fall below 1300 must satisfactorily complete a one-semester course in writing, normally during his freshman year, unless he applies to take and demonstrates satisfactory performance on a writing test administered during orientation week. A student whose combined scores are 1300 or better may take a course in writing but is not required to do so.
- C. *Physical Education*: A student must acquire four semester credits in a physical education program. Each of the four requirements may be satisfied by electing a semester course in an activity offered by the Departments of Physical Education, by participating for a season in a varsity sport, or by passing one of the skills tests offered. A student must begin this program in his first semester of residence and continue in the program until the requirements have been satisfied.

¹ An entering freshman may receive a limited amount of credit or advanced placement in certain fields through satisfactory achievement on the Advanced Placement Tests of the College Entrance Examination Board or, in some instances, on other evidence of superior preparation in secondary school. These fields are Biology, Chemistry, English Composition, English Literature, American History, European History, Latin, Mathematics, French, German, Spanish, and Physics. Further information can be obtained from the Dean of Admissions.

² These requirements represent the normal path to a degree from the College of William and Mary. However, in exceptional cases, a student by petition to the Committee on Degrees may be released from normal requirements and permitted to devise his own program in consultation with his advisor and subject to the approval of the Committee. In addition, a student may petition the Committee on Degrees to receive credit for any course in the curriculum by examination. Upon granting such a petition, the Committee shall request the department in which the course is normally offered to set an appropriate examination and to certify the results thereof to the College Registrar and to the Committee. Seniors will not be given permission to attempt to gain credit for courses by examination subsequent to registration for their final semester.

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

2. Area Requirements

A student must satisfactorily complete eight courses distributed among the following areas:

Area I. Classical Studies, English, Fine Arts, Humanities, Modern Languages, Music, Philosophy, Religion, Theatre and Speech.

Area II. Anthropology, Economics, Government, History, Psychology, Sociology.

Area III. Biology, Chemistry, Geology, Mathematics, Physics.

The eight area courses must be chosen according to the following rules:

(1) Each student must take a minimum of two semester courses in a single department within each area, not including courses in the department of his concentration.

(2) Each student must take two additional courses outside the area of his concentration. At least four courses outside the area of concentration must form a logical sequence of introductory and advanced courses or a logical combination of courses on an interdisciplinary topic. Approval for an interdisciplinary sequence must be obtained from the Dean of the Faculty of Arts and Sciences, upon the recommendation of the chairmen of the departments concerned.

(3) Each student must complete at least six of these eight required courses before he will be permitted to register for his fourth academic year.

(4) Certain courses offered by a department assigned to one area may be designated by the Educational Policy Committee as suitable for meeting these requirements in another area; but no student may fulfill the area requirements in more than one area with courses offered by the same department.

(5) The semester courses in writing and foreign language courses which are not primarily concerned with the study of the literature or culture in the language do not count toward meeting the area requirements.

(6) In addition to satisfying the Area III requirement by two semester courses in a science, a candidate for the B.S. degree must take two additional semester courses in a different science, selected in accordance with the requirements of the department in which the student is concentrating.

(7) For the purpose of meeting the above regulations regarding area requirements, Business Administration and Education concentrations are designated as being in Area II.

(8) Courses taken on a pass-no credit basis may not be used to satisfy area, sequence or concentration requirements.

3. Concentration

Before the end of the sophomore year each student shall select either a departmental or an interdisciplinary concentration. A student cannot change his concentration after registration for the second semester of the senior year.

A. Departmental concentrations are offered (*for the Bachelor of Arts degree*) in Anthropology, Classical Studies¹, Economics, Education, English Language and Literature, Fine Arts, Geology, Government, History, Mathematics, Modern Languages², Music, Philosophy, Physical Education for Men, Psychology, Religion, Sociology, Theatre and Speech, and (*for the Bachelor of Science degree*) in Biology, Chemistry, Geology, Mathematics, Physical Education for Men, Physics, and Psychology.

The student in consultation with the chairman of his major department shall select the courses for concentration. A department must require at least twenty-seven se-

¹ The Department of Classical Studies offers concentration in Greek, Latin, and Classical Civilization.

² The Department of Modern Languages offers concentration in French, German, and Spanish.

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

mester credits in a single subject field for a concentration but may not require more than forty-two semester credits in all.

When a student decides to concentrate in a subject field in which he has already received credit for an area requirement, that credit shall be counted as part of his concentration and he will have to fulfill the area requirement in another subject field.

No student shall be permitted to apply toward a degree more than forty-eight semester credits in a subject field. The subject fields include: Anthropology, Biology, Chemistry, Economics, Education, English, Fine Arts, French, Geology, German, Government, Greek, History, Latin, Mathematics, Music, Philosophy, Physical Education for Men, Physics, Psychology, Religion, Sociology, Spanish, and Theatre and Speech.

Students in Elementary and Secondary Education may apply twenty-seven semester credits and twenty-four semester credits respectively in Education toward the A.B. degree.

B. Interdisciplinary concentrations are supervised by a Committee on Interdisciplinary Studies. Any student may submit a plan for an interdisciplinary concentration for the approval of this committee. Applications are available in the office of the Dean of Students.

SPECIAL PROGRAMS

DEPARTMENTAL HONORS PROGRAM

The Departmental Honors Program provides special opportunities for the intellectual stimulation and development of superior students in certain departments through independent study. Departments participating in the program during the 1973-74 academic session are Anthropology, Biology, Classical Studies, Economics, English, Fine Arts, Government, History, Modern Languages, Philosophy, Physics, Psychology, and Sociology.³ Students in this program may, as the result of distinguished work, be awarded a degree with "Honors," "High Honors," or "Highest Honors."

I. Eligibility, Admission and Continuance in the Program

- A. Eligibility is contingent upon the student's achieving a minimum quality point average of either (1) 2.0 on a cumulative basis by the end of the junior year, or (2) 2.0 for the junior year alone.
- B. A student who wishes to pursue honors work and who has good reason to believe that he will qualify under paragraph "A" above should declare his interest as early as possible to the Chairman of his Department. Such declaration should be made in the spring of his sophomore year when he declares his field of concentration but may be made as late as the spring of his junior year. Application for admission to honors must be made in the spring of the junior year. The student who is acceptable to the Chairman of the Department and whose eligibility has been certified by the Dean of the Faculty of Arts and Sciences will be admitted to candidacy (subject to considerations of teaching staff availability) prior to registration in the fall of the student's senior year.
- C. The continuance of a student in the Honors Program is contingent on his maintaining what his major department judges to be a sufficiently high standard of work.

II. Minimum Requirements for a Degree with Honors

- A. Satisfactory completion of a program of reading and research supervised by a faculty member designated by the head of the student's major department. Six

³ See the descriptions under these departments for specific requirements.

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

hours of credit in a course designated 495-496 in each department offering Honors shall be awarded each student satisfactorily completing the program.

- B. Satisfactory completion of the general requirements for the degree of A.B. or B.S.
- C. Presentation of an Honors Essay or completion of an Honors Project acceptable to the major department. This requirement must be met by May 1 of the student's senior year.
- D. Satisfactory performance in a comprehensive examination in the field of the student's major interest.

III. Examining Committee

- A. Each comprehensive examination shall be set and judged and each Honors Essay or Project shall be judged by an examining committee of not less than three members, including at least one member of the faculty of the candidate's major department and at least one faculty member from another department.
- B. Examining committees shall be appointed by the Dean of the Faculty of Arts and Sciences.

IV. Standards

- A. Final determination of a student's standing with respect to honors shall rest with his examining committee. The committee shall take into account (1) the recommendation of the major department, (2) the recommendation of the major advisor, and principally (3) its own judgment of the comprehensive examination and essay or project.
- B. A minimum grade of "B" on both the comprehensive examination and the essay or project is required for "Honors." The award of "Honors," "High Honors," or "Highest Honors" shall be determined by the student's examining committee.
- C. When a student's work does not, in the opinion of the Committee, meet the minimum requirements for honors, the faculty members supervising the student's Honors work will determine what grade should be granted. A student may be dropped from honors work at the end of the first semester.

PROJECT PLUS: AN ACADEMIC AND RESIDENTIAL PROGRAM

Project PLUS is an enterprise that combines a study program with special living arrangements. It is made up of 84 sophomores, juniors and seniors who live in the PLUS residence hall and who enroll for part of their academic work in special courses taught by faculty in the residence hall itself. All course work in the Project centers on a common theme. Objectives of the Project are: (1) to integrate in-class and out-of-class activity; (2) to offer more opportunity for experimentation in teaching and course design; (3) to encourage interdisciplinary study. By virtue of his enrollment in one tutorial and in the forum, each student earns four hours of elective credit each semester graded on a Pass/No Credit basis.*

ACADEMIC REGULATIONS

STUDENT'S PROGRAM

Any student who is admitted to the College is normally assumed to be a degree candidate and is required to register in each semester for a full-time load of courses for

* For further information, see pages 33 and 135.

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

academic credit within the permitted range of registration. A degree student may register for any number of academic credits per semester falling within the range of 12 credits minimum and 18 credits maximum, excluding required physical education courses. The normal load for a student planning to graduate with a degree in four years is 15 academic credits per semester, or 30 credits each academic year. An academic year is comprised of the first semester plus the second semester but does not include the summer session. Work successfully completed during a summer session is counted toward the 120 academic credits required for graduation, as is the case with transfer credit or advanced placement, but it does not count in the application of continuance standards in any academic year.

Non-credit courses may be carried in addition to the normal load and will be listed on the student's transcript with the notation "Pass" or "NC" but will in no way count toward a degree.

Petitions for underloads or overloads, when warranted by special circumstances, may be granted by the Committee on Academic Status; these petitions should be made in writing to the Office of the Dean of Students preferably within a period of 5 days before the first day of registration for the semester in question, but not later than 2 days before the close of the period allowed for course changes without penalty. Only to exceptionally able students, however, will the Committee on Academic Status grant permission to carry more than 18 academic credits.

A student may arrange with the Registrar, within the period allowed for course changes, to elect one course in each semester of the junior and senior years to be graded on a Pass/No Credit basis. This option, once exercised, is irrevocable.

CLASSIFICATION OF STUDENTS

A sophomore student must have completed at least twenty-four (24) credits in academic subjects, with at least twenty-four (24) quality points. A junior student must have completed at least fifty-four (54) credits in academic subjects, with at least fifty-four (54) quality points. A senior student expecting to graduate in June must have completed eighty-five (85) credits in academic subjects, with at least eighty-five (85) quality points. The social standing of every student is identical with the academic.

CONTINUANCE IN COLLEGE

The standards which are set forth below are considerably less than those which are necessary to insure completion of degree requirements within four academic years.

There is no minimum number of academic credits that a student must earn in each semester, except in the case of a student who is placed on academic probation by the Committee on Academic Status. However, minimal progress and continuance in college require that a student maintain the following schedule of accumulated academic credits (exclusive of work earned during a summer session, through transfer, or through advanced placement): 15 semester credits at the end of the first academic year, 39 semester credits at the end of the second academic year, 66 credits at the end of the third academic year, and 93 semester credits at the end of the fourth academic year.

In addition, a student must have completed at least six of the eight required area and sequence courses before he will be permitted to register for his fourth academic year.

Students permitted to continue in College on probation and students readmitted to the College on probation are required to meet certain additional standards as established by the Committee on Academic Status. The normal probation period is one academic year. A student who is continuing on probation or who is returning to the College on probation must register for at least 12 academic credits of course work in each semester and must successfully complete all work attempted. A student who is placed

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

on probation and who during this period is permitted to attend summer session must complete successfully all work attempted during the session. In other words, during a period of probation a student is precluded from electing to drop with a designation of NC any course for which he registers, and he may not register for less than 12 academic credits.

WITHDRAWAL FROM COLLEGE

Students who desire to withdraw from College should apply to the Office of the Dean of Students for permission to withdraw. The permanent record card of any student who withdraws from College without permission from the Dean will carry the notation "Withdrew Unofficially."

The Committee on Academic Status reserves the right to determine the status of students who have withdrawn from the College after the add-drop period in either semester.

EVALUATION OF CREDITS FROM OTHER INSTITUTIONS

The credits of students transferring from other institutions will be evaluated only tentatively upon matriculation. Transfer grades are recorded as earned but all students must earn at the College of William and Mary a number of quality points equal to the number of academic credits successfully completed at the College. Thus, a transfer student may not use grades earned at another institution to make up a deficit of quality points at the College of William and Mary. Evaluations of records are not made by the Committee on Degrees until after students have been selected for admission.

Transfer credit is granted for any course taken at an accredited college or university in which the student has earned a grade of "C" or better (or, in the case of a course taken on a "pass-fail" basis, a grade of "P"), provided that the course is comparable to a course offered for academic credit at the College. A course is deemed comparable to a course offered for academic credit at the College if either (a) the course is exactly like or very similar to a course offered for academic credit at the College, or (b), if it is a course which does not meet condition (a), it is of such a nature that it would carry academic credit if it were offered by the College. It is not necessary that a course exactly match, or be similar to a course offered at the College in order to be granted transfer credit.

Equivalence transfer credit is granted for courses satisfying condition (a). *Elective* transfer credit is granted for courses satisfying condition (b). Courses granted elective transfer credit will count toward the total number of academic credits required for the baccalaureate degree, but they may *not* be used to meet specific requirements such as those for area and sequence, course prerequisites, or concentration requirements without the approval of the Committee on Degrees acting on the recommendation of the appropriate department or school, or, in case a course does not come within the jurisdiction of a department or program at the College, the recommendation of the Committee on Interdisciplinary Studies. If a student wishes to use elective transfer credit to meet some specific requirement, such as those for area or sequence, course prerequisites or concentration, he may petition the department, school, or Committee on Interdisciplinary Studies, as appropriate. It is the responsibility of the student to furnish the relevant evidence needed to act on this petition. The recommendation of the department, school, or Committee on Interdisciplinary Studies is sent in writing to the Committee on Degrees for action.

Transfer credit will not be granted for courses which belong in one or more of the following categories: (a) courses in professional, vocational or sectarian religious study, (b) courses below the level of introductory courses at the College, (c) freshman English courses of more than one semester which are devoted primarily to writing or composition, (d) applied music courses not accompanied or preceded by courses in

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

music theory, (e) courses in a language previously taken in high school, (f) college orientation courses, and (g) courses which do not carry academic credit at the College, such as home economics, secretarial science, and military science courses without academic content.

No student may assume that credit will be given for work at other institutions until he has a written statement as to what credit will be accepted. Any student of the College in Williamsburg who proposes to attend a summer session elsewhere must have written permission in advance from the Chairman of the Committee on Degrees in order to insure that the credit may be transferred to the College in Williamsburg. Credit for extension courses in the field of concentration or for the requirements for the baccalaureate degree shall be limited to one-fourth of the total credit hours required. It is the policy of the College not to grant credit for attendance in service schools or training programs in the Armed Forces unless it can be demonstrated that such attendance is the equivalent of a course or courses offered at William and Mary. Academic courses taken while on military service at accredited colleges, universities or language institutes may be transferred in the normal manner. No credit will be granted for general military training.

CLASS ATTENDANCE

An educational system centered upon classroom instruction is obviously predicated on the concept of regular class attendance. In support of this concept, the following principles are to be observed:

1. Except for reasonable cause, students are expected to be present at all regularly scheduled class meetings, particularly their last scheduled class in each of their courses preceding and their first scheduled class in each of their courses following the Thanksgiving, Christmas, and Spring holidays.

2. Students whose attendance becomes unsatisfactory to the extent that their course performance is affected adversely should be so informed by their instructor and the same reported to the Office of the Dean of Students.

CHANGES IN REGISTRATION

For a period of two weeks after the beginning of classes a student may add or drop courses. The procedure for adding and dropping courses is initiated by making application to the Office of the Registrar, and must be completed by the last day of the registration adjustment period. The Registrar, in turn, records the change on the student's registration card and informs the instructor or instructors concerned. Unless a course change has been made in this manner it has no official standing and will not be recognized as valid by the College. Courses dropped during the adjustment period are not entered on the student's academic record.

A student may add a course after the adjustment period only in the most unusual circumstances. A petition to add a course must have an explicit, positive written recommendation from the student's advisor, as well as the consent of the instructor of the course to be added, before it is considered by the Committee on Academic Status. The procedure for adding courses is initiated by making application to the Office of the Dean of Students, and the advisor's recommendation should be sent directly to that office.

A student may, at his own discretion, drop a course at any time during the semester. A course dropped after the adjustment period, for reasons other than medical ones, is entered upon the student's academic record and is designated NC (no credit). Students are strongly urged to confer with their advisor and with the instructor of any course which they contemplate dropping. A student should inform the instructor of a course which he drops. Any semester in which a student who is pursuing a full-time academic load drops all of his courses after the registration adjustment period for other than medical reasons is designated an "attempted semester" and is counted as

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

one semester for purposes of administering the ten-semester rule for the completion of degree requirements.

SYSTEM OF GRADING

The grades A, B, and C are used to indicate three degrees in the quality of passing work: A, excellent; B, good; and C, satisfactory. For each semester credit in a course in which a student is graded A he receives 3 quality points; B, 2; C, 1.

Any course which a student does not complete satisfactorily, for whatever reason except a medical one, receives the designation NC (no credit). If for medical reasons a course is not completed, the Registrar will make an appropriate notation on the student's record. A course in which the student does not take the final examination receives the designation NC. Arrangements for absence from a final examination for reasons of illness or other good grounds must be made with the Office of the Dean of Students and permission to take a deferred examination must be obtained from the Dean of the Faculty of Arts and Sciences.

Courses taken on a "pass-no credit" basis and work in required Physical Education receive the grade of P upon satisfactory completion.

The grade "G" indicates that the instructor has deferred reporting the student's grade, when there is not sufficient evidence on which to base a grade.

The grade "I" indicates that because of illness or other major extenuating circumstances, the student has postponed, with the explicit consent of the instructor, the completion of certain required work other than the final examination. "I" automatically becomes NC at the end of the next semester if the postponed work has not been completed.

The quality point average will not appear on the student's grade reports.

EXAMINATIONS

The examinations, given at the end of each semester, take place at the times announced on the examination schedule, which is coordinated by the Dean of the Faculty of Arts and Sciences and attached to the class schedule. Students are required to take all of their examinations at the time scheduled, unless excused on account of illness or other sufficient reasons by the Office of the Dean of Students. Students should present their reasons for an expected absence to the dean in advance of the examination. No excuse on the ground of illness will be accepted unless it is approved by the College physician.

Deferred examinations are authorized by the Dean of the Faculty of Arts and Sciences for students who have been excused by the Office of the Dean of Students from taking their examinations at the regular time. Members of the faculty are not authorized to grant deferred examinations. The deferred examinations for courses in the first semester are given in the fourth week of the second semester; the deferred examinations for courses in the second semester are given during the orientation period in September. Except under very exceptional circumstances students are not permitted to postpone the taking of a deferred examination beyond the first occasion thus regularly provided; and in no case will permission to take a deferred examination be extended beyond a year from the time of the original examination from which the student was absent. The schedule of the deferred examinations, coordinated by the Dean of the Faculty of Arts and Sciences, will be mailed to each student who is entitled to take a deferred examination.

The College does not authorize re-examinations.

GRADUATE STUDY

The College offers the degrees of Master of Arts in Biology, Chemistry, Education, English, Government, History, Marine Science, Mathematics, Physics, Psychology

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

and Sociology; *Master of Science* in Applied Science, Mathematics, and Physics; *Master of Education*; *Master of Law and Taxation*; *Master of Business Administration*; *Juris Doctor*; *Doctor of Education*; and *Doctor of Philosophy* in History, Marine Science, and Physics.

For degree requirements consult the Graduate Catalog of the Faculty of Arts and Sciences and the School of Marine Science, or the catalogs of the School of Business Administration, the School of Education, and the Marshall-Wythe School of Law. For the administration offices to which to direct inquiries see p. iii.



IV. FIELDS OF CONCENTRATION AND COURSE DESCRIPTIONS

THE chapters in this section describe, in alphabetical order, the requirements for concentration in the various fields offered by the College according to the departments and schools offering them. The chapters also include the undergraduate course offerings of the departments, schools, and particular programs listed according to course number. Courses that satisfy proficiency requirements are so designated and courses that can be taken to fulfill area and sequence requirements are indicated by symbols as described below.

Also described in the chapters are the requirements for departmental honors study, when that is provided. The last chapters explain the special programs of the College, and the pre-professional programs that the College offers.

EXPLANATION OF COURSE DESCRIPTIONS

(A) This course satisfies area requirements.

(S) This course satisfies sequence requirements.

(AS) This course satisfies area and sequence requirements.

(*) Starred courses may be taken only with the consent of the instructor.

(‡) Daggered courses may be taken only with the consent of the head of the department or dean of the school concerned.

Pairs of numbers (201, 202) indicate continuous courses. A hyphen between numbers (101-102) indicates that the courses *must* be taken in the succession stated.

Courses involving laboratory or studio activity are so labeled. All others are classroom courses.

Semester hour credit for each course is indicated by numbers in parentheses.

FACULTY OF ARTS AND SCIENCES

DEPARTMENTS OF INSTRUCTION

ANTHROPOLOGY

PROFESSOR ALTSHULER (*Chairman of the Department*). ASSOCIATE PROFESSORS BAL-LINGALL, BARKA AND SUTLIVE. ASSISTANT PROFESSORS BRUSH, NOISIN, and REINHART. LECTURER SOUTHARD. VISITING PROFESSOR ZAMORA.

The department offers work in all sub-fields of anthropology and all major geographic areas. Field and laboratory training in archaeology, physical anthropology, and ethnography is provided in a variety of courses, as well as through individual research at the senior level. In conjunction with other departments and schools within the College, the department is developing programs in tropical studies, anthropology and education, historical archaeology, and comparative colonial studies. Under the auspices of the Southside Historical Sites Foundation and other agencies, the department conducts research at Yorktown and Flowerdew Hundred Plantation.

REQUIREMENTS FOR CONCENTRATION

Concentration in Anthropology requires 33 semester credits in anthropology, including Anthropology 201, 202, 301, 302, 400 and 401-402. Honors candidates will take 495 and 496 in place of 401-402.

DESCRIPTION OF COURSES *

150. The Anthropological Perspective. *Fall* (3) Mr. Brush

An introduction to the ways in which the anthropologist views the relationship of man, nature, and culture.

201. Introductory Anthropology. (AS) *Fall* (3) Staff

A general introduction to the field of anthropology. Particular attention will be given to recent archaeological discoveries concerning the origins of man, the development of agriculture, and the beginnings of urbanization.

202. Cultural Anthropology. (AS) *Spring* (3) Staff

The application of the concept of culture to the study of contemporary societies, both primitive and modern. Such institutional areas as magic and ritual; crime, custom, and law; economy; and courtship, marriage and childrearing will be analyzed cross-culturally.

301. Methods in Archaeology. *Fall* (3) Mr. Barka

A general introduction to field and laboratory techniques of prehistoric and historic archaeological research.

302. Methods in Ethnography. *Spring* (3) Staff

An introduction to field study including the collection and interpretation of data. The course will also include a review of techniques developed by ethnographers for the study of living communities.

* Course work at the 100 or 200 level is ordinarily a prerequisite for upper level courses.

ANTHROPOLOGY

304. Primitive Economic Systems. (AS) *Fall* (3) Mr. Reinhart

A study of representative economic systems of both prehistoric and modern non-industrial cultures. The course explores the evolution of technology and subsistence techniques, the development of the market system, and the interrelationship of economic organization and other aspects of culture.

307. Social Anthropology. (AS) *Fall* (3) Mr. Zamora

An introduction to the study of the major social features of non-industrial peoples from a functional point of view. Topics considered are: incest and exogamy, marriage, the family, kinship, descent and descent groups, age and sex associations, stratification.

308. Primitive Religion. (AS) *Fall* (3) Mr. Sutlive

This course will examine the religious systems of primitive societies. Topics to be considered include myth and ritual, sorcery and witchcraft, nativistic movements, magic, and shamanism. The course will also examine the effects of modernization on primitive belief systems.

309. Physical Anthropology. (AS) *Spring* (3) Ms. Ballingall

An examination of the evolution of the hominids and of the relations between them and the forms closest to them, the Primates. Attention will be given to fossil forms, and to fossil and living populations.

310. History of Anthropology (AS) *Spring* (3) Mr. Sutlive

The course will cover the development of the field of anthropology in the 19th and 20th centuries. The student will read original works by major contributors to anthropological literature such as Morgan, Tyler, Frazer, and Kroeber.

311. Archaeology of North America. (AS) *Fall* (3) Mr. Reinhart

An introduction to the prehistory of North America north of Mexico from the earliest peopling to the historic period. The dynamics of culture development and the relation of prehistoric cultures to historic tribes will be analyzed.

314. Indians of North America. (AS) *Spring* (3) Mr. Reinhart

A survey of the major culture areas of aboriginal North America north of Mexico at the time of European contact. The post-contact relations between the Native Americans and the dominant White culture and the present-day situation and problems of Native Americans will be examined.

321. Archaeology of Middle and South America. (AS) *Spring* (3) Mr. Reinhart

An introduction to the prehistory of Middle and South America with special attention to the development of Aztec, Maya, and Inca civilization.

323. Peoples and Cultures of South America. (AS) *Fall* (3) Mr. Brush

A descriptive survey of the major culture areas of South America, analyzed in terms of such variables as race, language, ecology, dominant values, and culture contacts.

330. Peoples and Cultures of the Caribbean. (AS) *Spring* (3) Mr. Noisin

An introduction to the peoples and cultures of the Caribbean with particular attention given to social distinctions based upon class, ethnicity, race, language, land tenure, and religion.

331. Peoples and Cultures of Africa. (AS) *Fall* (3) Mr. Noisin

An introduction to peoples and cultures of Africa. The ideological, social, political and economic aspects of representative cultures are examined. Emphasis is placed on

ANTHROPOLOGY

learning how to apply information gathered from particular African peoples to problems of general interest in the social sciences.

340. Peoples and Cultures of Insular Southeast Asia. (AS) *Spring* (3) Mr. Sutlive

A descriptive survey of the ethnic groups of Insular Southeast Asia, analyzed in terms of ecology, social structure, technology, and cultural pattern. The course concerns itself with insular southeast Asia of the ethnographic present and the present day.

342. Peoples and Cultures of Mainland Southeast Asia. (AS) *Spring* (3) Mr. Sutlive

A descriptive survey of the major ethnic groups of Mainland Southeast Asia, analyzed in terms of ecology, language, social structure, and cultural configuration. The course concerns itself with southeast Asia in the ethnographic present and the present day.

344. Peoples and Cultures of Oceania. (AS) *Fall* (3) Ms. Ballingall

A descriptive survey of the Pacific Island World, including Aboriginal Australia, analyzed in terms of such variables as social organization, cultural pattern, and culture contact.

346. Peoples and Cultures of South Asia. (AS) *Spring* (3) Mr. Zamora

A descriptive survey of the ethnic groups of the sub-continent of India and Ceylon. These societies and cultures will be analyzed in terms of ecology, social structure, value systems, and demography.

352. Archaeology of Europe. (AS) *Spring* (3) Mr. Barka

A survey of the prehistoric and early historic cultures of Europe, covering the Paleolithic, Neolithic, Bronze, and early Iron Ages. Comparisons will be made with the cultural development of Asia, the Middle East, and Africa.

400. Anthropological Theory. *Fall* (3) Mr. Altshuler

A seminar for senior concentrators in anthropology which deals with theories concerning the relationship of man, nature, society and culture presented by anthropology and related disciplines.

401-402. Anthropological Research. *Fall and Spring* (3) Staff

Independent study which will culminate in a senior essay. Required of all concentrators. (Honors candidates will take 495-496 in place of 401-402).

408. Culture and Tradition in Pre-Colonial Africa. (AS) *Fall* (3) Mr. Noisin

A survey of the development of African culture from the rise of the great Sudanic Kingdoms until the partition of Africa by the European powers following the Berlin conference of 1884-85.

411. Cultural Patterns and Technological Change. (AS) *Fall* (3) Ms. Ballingall

An examination of the role of cultural practices and interdependent cognitive frameworks which facilitate or impede modernization of societies now encompassed within so called underdeveloped areas. Case studies by anthropologists from a variety of cultures will be presented.

417. Special Topics in Anthropology.

Anthropology and Education. (AS) *Fall and Spring* (3, 3) Mr. Noisin

Tropical Ecology. (AS) *Fall* (3) Mr. Sutlive

ANTHROPOLOGY

The Philippines: Colonial Innovations and Traditional Responses. (AS) *Fall* (3) Mr. Zamora

Ethnic Minority-Majority Relations in Southeast Asia. (AS) *Spring* (3) Mr. Zamora

422. Personality in Culture. (AS) *Fall* (3) Mr. Altshuler

The relationship of personality type to cultural factors such as myth and ritual, subsistence patterns, language, and child rearing will be considered utilizing data from a variety of cultures. Special attention will be given to differing concepts of identity, and mental illness and health.

430. Descriptive Linguistics. (S) *Fall* (3) Mr. Southard (Same as English 405)

A study of contemporary linguistic theory and some practical methods of language analysis, including a comparison of the structures of diverse languages.

432. Historical Archaeology. (AS) *Spring* (3) Mr. Barka

The archaeology of the era since the beginning of the exploration of Europeans of the non-European world, with major emphasis upon North America. Artifacts of the period will be examined with a view toward reconstructing the daily life of the people.

440. Introduction to Historical Linguistics. (S) *Spring* (3) Mr. Southard (Same as English 406)

This course surveys the major results of Indo-European Historical Reconstruction. Some consideration is given to the contributions of recent Generative Phonology and Indo-European. The course also includes some investigations into non-Indo-European Reconstruction.

450. Anthropology and Medicine. (AS) *Spring* (3) Mr. Altshuler

The medical system of the United States will provide the basic unit of comparison for a review of the ways in which different societies cope with problems of ill-health. The focus will be upon cultural variation in definitions of "illness" and "therapy" and the manner in which such definitions and practices are interrelated with other aspects of culture.

HONORS STUDY

495-496. Honors. *Fall and Spring.* (3, 3) Staff

Students admitted to Honors Study in Anthropology will be enrolled in this course during both semesters of their senior year. The course comprises: (a) supervised research in the student's special area of interest; (b) the preparation and presentation by May 1 of an Honors Essay; and (c) satisfactory performance in a comprehensive oral examination in the field of the student's major interest.

The department does not intend to offer 495-496 after the 1973-74 session.

Biology

PROFESSORS BYRD (*Chairman of the Department*), BALDWIN, BLACK, BROOKS, COURSEN, and Terman. ASSOCIATE PROFESSORS ACETO, GRANT, HALL, MANGUM,* MATHIES, SPEESE, VERMEULEN, and WARE. ASSISTANT PROFESSORS BECK, BRADLEY, DOW, FASHING, SCOTT, and WISEMAN.

The program of the Department of Biology is organized to provide concentrators with a sound introduction to the principles of biology and to develop an appreciation for the diversity and complexity of living things. The Department attempts to provide concentrators both breadth and depth of training as well as a variety of approaches to the study of life, while allowing maximum flexibility in the development of programs consistent with the interests and needs of individual students. The Concentration requirements below have been designed with these objectives in mind.

Requirements for Concentration

A minimum of 38 credits is required for concentration in Biology. A maximum of 8 of these credits (which may include Chemistry 201, 202 or 203, 204) may be approved in other departments for courses above the 100 level completed with a minimum grade of "C". In addition to Biology 101, 102, a concentrator must take one course from each of the following five groups of courses. Some courses (marked with an asterisk) occur in two groups, but in such cases a single course may satisfy the requirement in only one group, and another course must be chosen from the second group. At least one course must be primarily zoological and at least one must be primarily botanical (those marked Z and B respectively). At least four courses above the 100 level must include laboratory work in addition to the lecture-discussion periods.

- A. (*Biology of Organisms*): 201 (Z); 206 (B); 208 (B); 209 (B); 215 (Z); *216 (Z); *305 (B); 412 (B); *416 (Z).
- B. (*Environmental Biology*): *216 (Z); *305 (B); *314; 407; 410 (Z); *416 (Z).
- C. (*Genetics and Evolution*): 302; *314.
- D. (*Developmental and Cell Biology*): 202 (Z); 203 (B); 301; 320 (B); *405; 422.
- E. (*Physiology and Biochemistry*): *405; 408 (Z); 414; 419 (B).

Chemistry 203 and 204 are required for concentration in Biology and are included in the calculation of the quality point average in the concentration. It is strongly recommended that Biology concentrators complete two semesters in both mathematics and physics. Students who intend to pursue graduate work in Biology should take a modern foreign language (German, French, or Russian) through 202.

DESCRIPTION OF COURSES

101-102 Introductory Biology. (A) *Fall and Spring* (4, 4) Mr. Coursen and Staff, Fall semester. Mr. Black and Staff, Spring semester.

Concepts of modern biology based on molecular and cellular structure; a brief survey of the plant and animal kingdoms relating morphology to physiology; discussions on ecology, organic evolution, and the relation between biological problems and human society. *Three Class Hours, Three Laboratory Hours.*

150. Freshman Seminar. *Fall and Spring* (Credit and Hours to be arranged.) Various special topics in Biology, depending on the instructor and the semester. This course does not count toward concentration, area, or sequence requirements. Staff.

* On leave, fall term, 1973-1974.

BIOLOGY

201. Comparative Anatomy of Vertebrates. (S) Fall (4) Mr. Byrd. Prerequisite: Biology 102.

Consideration of the evolution of the larger taxonomic groups of chordates with a comparative study of their gross morphology. *Three Class Hours, Six Laboratory Hours.*

202. Principles of Animal Development. (S) Spring (3 or 4). Mr. Wiseman. Prerequisite: Biology 102. An investigation of major events and processes of animal development. Topics include fertilization and early development, nuclear-cytoplasmic interaction, cell determination and differentiation, morphogenetic processes, growth, developmental neurobiology, neoplasia, aging, and genetic control of development. The optional laboratory is recommended for students interested in experimental developmental biology. *Three Class Hours (3 credits) or Three Class Hours, Three Laboratory Hours (4 credits).*

203. Principles of Plant Development. (S) Fall (3 or 4) Mr. Mathes. Prerequisite: Biology 101, 102. Discussion of cell growth, auxin balance, nutrition, and cell division as factors which contribute to the determination of developmental pathways in plants. The optional laboratory is highly recommended as a supplement to lectures for students interested in developmental biology or general botany. *Three Class Hours (3 credits) or Three Class Hours, Three Laboratory Hours (4 credits).*

206. Plant Taxonomy. (S) Spring (4) Mr. Baldwin. Prerequisite: Biology 101.

Phyletic relationships of flowering plants and ferns; principles of classification; collection and identification of representative native and cultivated plants. *Two Class Hours, Six Laboratory Hours.*

208. Morphology and Phylogeny of Plants. (S) Fall (4) Miss Speese. Prerequisite: Biology 101.

The morphology of representative lower plants is studied in the laboratory and in the field. Some experiments are performed. *Two Class Hours, Six Laboratory Hours.*

209. Anatomy of Land Plants. (S) Fall (4) Mr. Hall. Prerequisite: Biology 101.

A systematic survey of the major cell, tissue and organ types of the bryophytes, pteridophytes, gymnosperms and angiosperms. Taxonomy, life-cycles, paleobotany and evolutionary history of each group are discussed. *Three Class Hours, Six Laboratory Hours. (Alternate years; not offered 1973-74.)*

215. Vertebrate Biology. (S) Fall (4) Mr. Brooks.

A study of the ecology, taxonomy, behavior and physiological ecology of vertebrates, with special emphasis on the lower vertebrates. *Three Class Hours, Six Laboratory Hours.*

216. Invertebrate Biology. (S) Fall (4) Miss Mangum.

Ecology, taxonomy, morphology, physiology and behavior of invertebrate organisms. Phylogenetic relationships are emphasized. *Three Class Hours, Six Laboratory Hours.*

301. Microbiology. (S) Fall (4) Mr. Vermeulen. Prerequisite: Biology 101.

Homologies are stressed in the study of life using the elementary systems of selected bacteria and other microorganisms. With the ultimate goal of an understanding of current research, the areas covered included classical and modern techniques, biochemistry, sexual and asexual genetics. *Three Class Hours, Six Laboratory Hours.*

302. Genetics. (S) Fall (3 or 4). Mr. Baldwin or Mr. Grant. Prerequisite: Biology 101, 102; Introductory Chemistry and Mathematics are recommended. This course is

BIOLOGY

intended to be a comprehensive survey of genetics as a field. It includes three broad areas: classical mendelism; gene structure and function; and population genetics. Students may elect to take laboratory, consisting of either traditional class experiments or independent projects, and designed for students intending to pursue advanced studies in biology. *Three Class Hours (3 credits) or Three Class Hours, Six Laboratory Hours (4 credits).*

305. Phycology. (S) Fall (4) Mr. Scott.

Structure, reproduction, life histories, ecology and cytology of marine and freshwater algae. *Three Class Hours, Three Laboratory Hours.* (Alternate years; not offered 1972-73).

307. Human Physiology. Spring (3) Staff. *Prerequisites: Biology 101, 102 are suggested.*

Detailed study of the manner in which different organ systems of the human body function. An elective course not applicable towards the minimum requirements for concentration in Biology. *Two Class Hours, Three Laboratory Hours.*

308. Human Anatomy. Fall (3) Staff.

Gross and histological study of the human organism with particular emphasis on the neuro-muscular systems as related to physical and health education. An elective course not applicable towards the minimum requirements for concentration in Biology. *Two Class Hours, Three Laboratory Hours.*

314. Biological Evolution. (S) Spring (3) Mr. Brooks. *Prerequisites: Biology 101, 102, one other biology course. Introductory Chemistry and Mathematics are recommended.*

Principles of biological evolution: detailed discussion of natural selection, sources of variation, population genetics, isolating mechanisms, speciation and human evolution.

320. Fundamental of Mycology. (S) Spring (3 or 4) Mr. Coursen. *Prerequisites: Biology 101; knowledge of chemistry recommended.*

Designed to consider the general features common to most fungi by expounding on the broad trends in structure, function, and behavior which can be discerned in the group. Selected model systems which illustrate these features at the subcellular, cellular, and organismal level are examined. The optional laboratory is for students interested in broadening their botanical knowledge and acquiring laboratory skills needed in understanding and investigating fundamental processes in fungi. *Three Class Hours (3 credits) or Three Class Hours, Three Laboratory Hours (4 credits).*

402. Cytogenetics. (S) Spring (4) Miss Speese. *Prerequisite: Biology 302.*

Components of cells as related to genetics. Preparation and study of chromosomes. *Two Class Hours, Six Laboratory Hours.*

***403. Problems in Biology.** Fall and Spring (Credit to be arranged). Staff. Supervised projects selected to suit the needs of the individual student. Students may not apply more than three hours of Biology 403 toward a concentration in Biology. *Hours to be arranged.*

404. Topics in Biology. Fall and Spring (2-4 credits arranged) Staff. *Prerequisites: Biology 101, 102.*

Areas of special current research interest presented by resident and visiting faculty members as opportunity and demand arise. *Hours arranged.*

BIOLOGY

405. Cellular Physiology. (S) Fall (4) Mr. Black. *Prerequisites: Biology 101, 102; Chemistry 203, 204.*

The relationships between submicroscopic anatomy and chemistry of the cells are explored. Experiments dealing with cell-chemistry, permeability, metabolism, and growth are performed. *Three Class Hours, Six Laboratory Hours.*

406. Experimental Embryology. (S) Spring (4) Mr. Black. *Prerequisites: Biology 101, 202; Chemistry 203, 204.*

Lectures and experiments dealing with the mechanisms of fertilization, cleavage, gastrulation, and organ-differentiation in both invertebrates and vertebrates are given. *Three Class Hours, Six Laboratory Hours.*

407. General Ecology. (S) Fall (4) Mr. Ware. *Prerequisites: Biology 101, 102; a course in plant taxonomy, vertebrate zoology, or invertebrate zoology recommended.*

Discussion of interactions between organisms and their environment; factors controlling structure, function, and distribution of populations, communities, and ecosystems; survey of major biotic communities. *Three Class Hours, Three Laboratory Hours.*

408. Mammalian Physiology. (S) Fall (4) Mr. Bradley. *Prerequisites: Biology 101, 102 and Chemistry 201, 202; Physics 101, 102 recommended.*

The function of the animal as a whole as indicated by the physiology and inter-relationships of different organs and organ systems. *Three Class Hours, Four Laboratory Hours.*

409. Virology. (S) Spring (3) Mr. Vermeulen. *Prerequisite: Biology 301, 405 or 414.*

The mechanisms of infection and replication of selected animal, plant and bacterial viruses are discussed with special attention being directed at the type of genetic material involved—DNA or RNA. Virally induced tumors and cancers are discussed at some length. (Alternate years; not offered 1973-74).

410. Animal Behavior. (S) Fall (3) Mr. Terman. *Prerequisites: Biology 101, 102, Psychology 201, 202 recommended.*

Description of the known behavior patterns of selected invertebrate and vertebrate groups with emphasis on adaptive significance. The genetics, ontogeny and ecological significance of behavior patterns will be presented where known. (Alternate years; not offered in 1973-74).

412. Biology of the Vascular Plants. (S) Spring (4) Mr. Hall.

A study of the major families of vascular plants, emphasizing comparative morphology and evolutionary trends, ecological relationships, economic importance, classification, and research methods.

414. Biochemistry. Spring (3) Mr. Vermeulen. *Prerequisites: Mathematics 103; Chemistry 203, 204 or permission of instructor.*

A study of the molecular bases of living processes: The chemistry of the important constituents of living matter; energy metabolism; enzyme kinetics; thermodynamics; biosynthesis; metabolic control.

415. General Endocrinology. (S) Spring (4) Mr. Bradley. *Prerequisites: Biology 101, 102, and 408.*

The role of hormones in the maintenance of homeostasis, control of metabolic processes, and reproduction as exemplified by mammals. This course is intended as an introductory course and is a prerequisite for Comparative Endocrinology. *Three Class Hours, Four Laboratory Hours.*

BIOLOGY

416. Introduction to Ornithology. (S) Spring (4) Mr. Byrd. Prerequisite: Biology 102.

Introduction to the biology of birds; lecture and laboratory work on morphology, classification, migration, distribution, and breeding biology; field work on identification and general ecology. *Three Class Hours, Six Laboratory Hours.*

417. Biostatistics. Fall (4) Mr. Dow. Prerequisites: Mathematics 111-112 and at least two courses at the 300 level or above in Biology.

An introduction to the mathematical and statistical techniques available to analyze and to interpret the results of experiments in both a qualitative and quantitative manner. The emphasis will be placed on the applications of quantitative techniques in biological research. *Three Class Hours, Three Laboratory Hours.*

418. Experimental Biochemistry I. Spring (2) Mr. Vermeulen. Prerequisite or co-requisite: Biology 414 or Biology 405 or consent of the instructor.

An introduction to experimentation with biochemical systems, processes, and compounds of biochemical importance; identification and quantitative measurements of such constituents and of biological transformations. *Six Laboratory Hours.*

419. Plant Physiology. (S) Spring (4) Mr. Mathes. Prerequisites: Biology 101, 102; recommend Chemistry 203, 204.

Mechanisms of absorption, translocation, synthesis and utilization of materials. The role of internal and external factors in plant growth. *Three Class Hours, Four Laboratory Hours.*

422. Cell Structure and Function. (S) Spring (3 or 4) Mr. Scott. Prerequisites: Biology 101, 102; Chemistry 203 recommended.

Lectures deal principally with the correlation of ultrastructural morphology with cell function. The optional laboratory is recommended for students interested both in basic light microscopic histochemical techniques and in individual research projects in cytology. *Three Class Hours (3 credits) or Three Class Hours, Three Laboratory Hours (4 credits).*

424. Introduction to Radiation Biology. Spring (3) Mr. Aceto.

A study of the biological effects of radiation. Interaction of radiation with matter, basic mechanisms of radiation injury, biological manifestations of radiation damage.

426. Aquatic Ecology. (S) Spring (4) Mr. Dow. Prerequisites: Biology 407 or equivalent, and Biology 216 or Marine Science 410.

Introduction to the application of ecological principles to aquatic environments; discussion of the structure and function of selected communities; consideration of current areas of active research interest such as ecological succession, mathematical modeling, ecosystem theory, and biological competition. *Three Class Hours, Three Laboratory Hours.*

495-496. Honors. Fall and Spring (3, 3) Staff.

Honors is independent study for superior students in Biology. It consists of readings in the field of the student's interest with emphasis on the original literature, the preparation and presentation of an Honors Essay based on the student's own research, and satisfactory completion of a comprehensive examination in the subject area of the research. *Hours to be arranged.*

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in biology, write to the department chairman for a Graduate Catalog.

Chemistry

ASSOCIATE PROFESSOR KIEFER (*Chairman of the Department*). PROFESSORS ARMSTRONG, BAES ¹, DJORDJEVIC, HILL, and TYREE ², ASSOCIATE PROFESSORS ORWOLL, SCHIAVELLI, THOMPSON, and VULETIC ³. ASSISTANT PROFESSORS COLEMAN and KRANBUEHL. INSTRUCTOR KATZ.

The student concentrator in Chemistry is afforded the maximum variety of options upon graduation, as exemplified by what recent graduates are now doing. Many go directly into professional life as employees of private industry or governmental agencies in jobs as varied as: secondary school teacher, computer scientist, laboratory scientist, government inspector, the Peace Corps overseas, plant production, and research associate. Others find their background equally acceptable as qualification for entrance into Medical School, Dental School, Graduate School in Chemistry, Biology, Chemical Engineering, Metallurgical Engineering, Law, or Business. Thus the thrust of the Department of Chemistry is to educate its concentrators for a profession of the individual's choice. Such has been true for several decades since numbered among the more senior departmental alumni are medical doctors, lawyers, dentists, executives of large corporations, directors of research, secondary school teachers, university professors, research scientists and administrators.

Each concentrator is encouraged to engage in a research project in association with a member of the departmental faculty at some time during his period of matriculation. For some this takes the form of full-time work for a summer between the junior and senior years. More often the project will be part-time during the senior year. Occasionally a student will continue on a project for two or more years, part-time, starting rather early in his undergraduate curriculum for a few hours a week.

While the principal goal of the department is to impart scientific competence to its concentrators, the relationship of science (and its methodology) to society as a whole is stressed as well.

REQUIREMENTS FOR CONCENTRATION

The minimum number of semester credits required for concentration in Chemistry is 36, which must include Chemistry 101 or 103; either the sequence 102-201-202 or the sequence 104-203-204; 301-302; 303; and 304. Chemistry 105-106 may not be counted among the 36 credit hours. Concentrators should complete the 200-level courses before their junior year. Math 212 and a reading knowledge of German, French, or Russian are strongly recommended.

The Department offers small sections of Chemistry 101. They are designed for students expressing an especial interest in chemistry.

The Department is listed among those approved by the Committee on Professional Training of the American Chemical Society. Those graduates who meet certain minimum standards may be certified for recognition by the Society as having an ACS Certified BS in Chemistry. To meet such standards, Chemistry 305 and certain advanced courses in Chemistry are required which are chosen in consultation with the Chairman of the Department.

DESCRIPTION OF COURSES

101, 102. Introduction to Chemistry. (A) *Fall and Spring* (4, 4) Messrs. Kiefer and Tyree.

An introduction to the study of the common non-metallic and metallic elements with emphasis upon chemical laws and the development and application of chemical principles. Strongly recommended for students expecting to concentrate in chemistry.

¹ Visiting Professor, 1972-73.

² Chairman of the Department, 1972-73.

³ Visiting Professor, 1973-74.

CHEMISTRY

101: *Three class hours, four laboratory hours in alternate weeks, one hour demonstration in alternate weeks.* 102: *Three class hours, four laboratory hours.*

103. General Chemistry. (A) *Fall* (4) Mrs. Djordjevic and Staff.

An introduction to atomic structure, chemical bonding, chemical reactions, and the states of matter. Recommended for students planning a science-oriented career other than chemistry. *Three class hours, four laboratory hours in alternate weeks, one hour demonstration in alternate weeks.*

105-106. Survey of Chemistry. (A) *Fall and Spring* (4, 4) Mr. Thompson.

A contemporary approach to the concepts of chemistry emphasizing the role of chemistry in today's society and relating atomic and molecular structure to reactivity and properties of matter. Designed for the non-science major. *Three class hours, four laboratory hours in alternate weeks, one hour demonstration in alternate weeks.*

104-203-204. Chemistry and Life. (4, 4, 4) *Prerequisite: Chemistry 101 or 103.*

This course sequence is designed for students planning a career in medicine or the life sciences.

104. Organic Chemistry. (A) *Spring.* Mr. Coleman and Staff. An introduction to the functional groups of organic chemistry. Emphasis is placed on the principles of structure and reactivity of organic molecules found in living systems. *Three class hours, four laboratory hours in alternate weeks, one hour demonstration in alternate weeks.*

203. Organic Chemistry. (AS) *Fall.* Coleman and Staff. A continuation of the development of the chemistry of organic functional groups started in Chemistry 104. Particular emphasis is placed on the role of metals in living systems and the biosynthesis of organic molecules. *Three class hours, four laboratory hours in alternate weeks, one hour demonstration in alternate weeks.*

204. Physical and Bioanalytical Chemistry. (AS) *Spring.* Mr. Schiavelli and Staff. The application and use of thermodynamics, chemical kinetics, quantitative analysis, and instrumental techniques to the structure and function of chemicals in living systems. *Three class hours, four laboratory hours in alternate weeks, one hour demonstration in alternate weeks.*

201-202. Organic Chemistry, (AS) *Fall and Spring.* (4, 4) Mr. Hill and Staff. *Prerequisite: Chemistry 102.*

Chemistry of organic compounds. Chemical properties are correlated with electronic and three-dimensional aspects of the compounds of carbon. Recommended for students planning a career in chemistry. 201: *Three class hours, four laboratory hours in alternate weeks, one hour demonstration in alternate weeks.* 202: *Three class hours, four laboratory hours.*

301-302. Introductory Physical Chemistry. (S) *Fall and Spring* (4, 4) Messrs. Kranbuehl and Orwoll. *Prerequisite: Math 112. Prerequisites or Corequisites: Chemistry 303 and Physics 101-102.*

The states of matter, thermodynamics, electrochemistry, chemical kinetics, and quantum chemistry. *Three class hours, four laboratory hours.*

303. Quantitative Analysis. (S) *Fall* (3) Mr. Armstrong. *Prerequisite: Chemistry 102 or 104.*

Volumetric and gravimetric analysis. *Two class hours, four laboratory hours.*

304. Instrumental analysis. *Spring* (3) Mrs. Djordjevic. *Prerequisites: Chemistry 301 and 303.*

CHEMISTRY

Principles and applications of instruments to chemical analysis. *Two class hours, four laboratory hours.*

305. Inorganic Chemistry. (S) *Fall* (3) Mr. Tyree. *Prerequisite: Chemistry 202 or 204 or equivalent.*

Study of the properties and reactions of chemical elements and their compounds.

401. Advanced Physical Chemistry. *Fall* (3) Mr. Orwoll. *Prerequisite: Chemistry 302.*

Introduction to theoretical chemistry, quantum mechanics, molecular spectroscopy, and statistical mechanics.

402. Advanced Inorganic Chemistry. *Spring* (3) Mr. Thompson. *Prerequisite or Corequisite: Chemistry 302.*

Principles of physical chemistry and quantum mechanics applied to the study of the structures and reactions of inorganic substances.

403. Advanced Organic Chemistry. *Fall* (3) Mr. Schiavelli. *Prerequisite: Chemistry 202. Prerequisite or Corequisite: Chemistry 301.*

A structure-reactivity approach to reaction mechanisms, applications of spectroscopic methods to structural analysis and modern synthetic chemistry.

405. Modern Laboratory Techniques. *Fall* (3) Messrs. Schiavelli and Thompson. *Prerequisite: Chemistry 304 or equivalent.*

A laboratory course providing exposure to modern experimental techniques in all areas of chemistry. *One class hour, six laboratory hours.*

406. Radiochemistry. *Spring* (3) Mr. Kiefer. *Prerequisite or Corequisite: Chemistry 302.*

A study of radioactive decay; interaction of radiation with matter; nuclear structure; nuclear reactions; radiochemical techniques.

409. Introduction to Chemical Research. *Fall and Spring.* (hours and credits to be arranged). Staff.

A course for the advanced student affording an opportunity for individual work on a problem under the supervision of an individual faculty member.

412. Introduction to Macromolecules. *Spring* (3) Messrs. Orwoll and Kranbuehl. *Prerequisite or Corequisite: Chemistry 302 or consent of the instructor.*

A study of the relationship of chemical and physical properties of synthetic and biological polymers to their molecular structure.

495-496. Honors. *Fall and Spring* (3, 3) Staff.

Students admitted to Honors Study in Chemistry will be enrolled in this course during both semesters of their senior year. The requirements include a program of research in chemistry with readings from the original literature, the preparation and presentation of an Honors Essay based on the student's reading and research, and the satisfactory completion of a comprehensive examination in the subject area of the research. *Hours to be arranged.*

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in chemistry, write to the department chairman for a graduate catalog. Attention is also called to the Graduate Program in Applied Science on p. 168.

Classical Studies

PROFESSOR JONES (*Chairman of the Department*). ASSOCIATE PROFESSOR LEADBEATER.
ASSISTANT PROFESSORS BARON and REILLY.

PROGRAM

The principal objectives of the Department of Classical Studies are two:

1. To contribute broadly to the humanistic education of the undergraduate student both through courses involving the reading of the original Greek and Latin literatures and through courses conducted in English in the area of Classical Civilization;

2. To offer those students who wish it a specialized training in the Greek and Latin languages or in Classical Civilization for vocational or professional purposes.

In recent years, a large number of graduates have become teachers at the secondary level or have continued their study of the Classics in graduate school. Equally as many others have used their undergraduate training as a basic educational background for various businesses, occupations and professions.

CONCENTRATION REQUIREMENTS

The Department of Classical Studies offers concentrations in three subject fields: Greek, Latin, and Classical Civilization.

A concentration in Greek consists of a minimum of 27 hours taken in the Department of Classical Studies, exclusive of courses in Classical Civilization. A minimum of six hours of Latin is required.

A concentration in Latin consists of a minimum of 27 hours taken in the Department of Classical Studies, exclusive of courses in Classical Civilization. A minimum of six hours of Greek is required.

A concentration in Classical Civilization consists of a minimum of 35 hours divided as follows:

- (1) 8 hours of elementary Latin or Greek

- (2) 27 hours from courses listed below under the heading "Classical Civilization" (pp. 81-82) or included in the following list: Anthropology 301, Anthropology 352, Fine Arts 403, Government 303, History 311, Philosophy 422 (Plato or Aristotle), Religion 220, Religion 305, Theatre 315. Among the courses selected must be 18 hours representing three one-year sequences from three of the following areas: Classical Literature, Classical History, Classical Art & Archaeology, Classical Philosophy.

NOTE: All students concentrating in Greek, Latin, or Classical Civilization will be required to demonstrate on examination a knowledge of Classical literature and of the history of the ancient world. (Requirement may be met by completing satisfactorily Classical Civilization 207, 208, 311, and 312).

DESCRIPTION OF COURSES

101-102 Elementary Greek. *Fall and Spring (4,4)* Mr. Leadbeater.

The elements of the Greek language with translation of stories and poems from selected readers. Parallel study of aspects of Greek civilization and of the legacy left by Greek culture and thought to the modern world.

201. Introduction to Greek Literature: Prose. (A) *Fall* (3) Mrs. Reilly. *Prerequisite:* Greek 102.

A course designed to introduce the student to the basic syntactical and stylistic elements of 5th-4th cent. B.C. Attic prose through an intensive examination of selected works of Plato, Lysias, and Thucydides. Emphasis will be placed on literary tech-

CLASSICAL STUDIES

niques and the comprehension and appreciation of Greek in Greek rather than in English.

202. The Literature of Greece: Prose and Poetry. (A) *Spring* (3) Mrs. Reilly. *Prerequisite:* Greek 201.

Continued analysis of the style, compositional techniques and content of representative prose writers, such as Plato, Aristotle, Herodotus, and Xenophon. In the second half of the semester the student will be introduced to the form and content of dramatic poetry through the reading of one of the tragedies of Sophocles or Euripides.

***Greek Literature Cycle.** *Fall or Spring* (3) Mr. Leadbeater and staff. *Prerequisite:* Greek 202 or permission of the instructor.

The following courses are offered as the needs and wishes of students in the Department in any year may demand and as staff is available.

301. Philosophy—Plato (AS)

302. New Testament—The Gospels, Acts and Epistles. (AS)

303. Homer—Selections from *Iliad* and *Odyssey*. (AS)

304. Philosophy—Aristotle. (AS)

305. Attic Orators (AS)

402. Herodotus. (AS)

403. Thucydides (AS)

404. Lyric Poetry. (AS)

405. Greek Tragedy—Aeschylus, Sophocles, Euripides. (AS)

406. Greek Comedy—Aristophanes and Menander. (AS)

490. Topics in Greek—Course may be repeated if readings differ. (S)

Latin

101-102. Elementary Latin. *Fall and Spring* (4,4) Mr. Baron. Students who have acquired two high school units in Latin may not take Latin 101, 102 for credit.

This course is designed to equip the student with a mastery of the structure of the Latin language and with a knowledge of basic vocabulary. There are translations from appropriate Latin texts and parallel study of pertinent aspects of Roman life and history.

201, 202. Introduction to Latin Prose and Poetry. (A) *Fall and Spring* (3,3) Mrs. Reilly and Mr. Jones. *Prerequisite:* at least two units of high school Latin or Latin 101, 102.

In the first semester (201) there is a review of the elements of the language and the reading of passages from selected authors with emphasis upon Cicero, with parallel study of the history and institutions of Republican Rome. In the second semester (202) there is reading of selected books of Vergil's *Aeneid* with parallel study of the history and institutions of the Empire and of the epic and its influence upon subsequent literature.

NOTE: A student who has had three years of Latin in high school and read Latin prose in the third year may not take Latin 201 for credit, but may take Latin 202. A

CLASSICAL STUDIES

student who has had three years of Latin in high school and read Latin poetry in the third year may not take Latin 202 for credit, but may take Latin 201. A student who has had four years of Latin in high school may take neither Latin 201 nor Latin 202 for credit.

249, 250. Literature of the Republic and the Empire. (AS) *Fall and Spring* (3,3) Mr. Jones. *Prerequisite:* three or four units of high school Latin or Latin 201, 202.

The reading of selections from a number of important writers of the periods of the Republic and Empire.

***Latin Literature Cycle.** *Fall or Spring* (3) Mr. Jones and Staff. *Prerequisite:* Latin 249, 250 or equivalent.

The following courses are offered as the needs and wishes of students in the Department in any year may demand and as staff is available.

301. Cicero's and Pliny's Letters. (AS)

302. Latin Lyric: Catullus and Horace. (AS)

303. Cicero's Orations (AS)

304. Elegiac Poets: Propertius, Ovid, Tibullus. (AS)

305. Roman Comedy: Plautus and Terence. (AS)

307. Roman Private Life: A study based on the Latin authors. (AS)

308. Latin Composition based upon a Classical Model.

Reading of such Latin prose authors as Caesar, Cicero, and Nepos followed by the writing of connected Latin passages in imitation of their style.

310. Medieval Latin—Prose and Poetry. (AS)

401. Horace's Satires and Epistles. (AS)

402. The Latin Historians. (AS)

404. Vergil—The Latin Epic (AS)

405. The Teaching of High School Latin. Same as Education S305. Development of the Latin curriculum, methods of presentation, audio-visual aids, materials.

406. Satires of Juvenal and Epigrams of Martial. (AS)

407. Lucretius—*De Rerum Natura*. (AS)

408. The Latin Novel: Petronius or Apuleius. (AS)

490. Topics in Latin.—Course may be repeated if readings differ. (S)

GRADUATE COURSES—GREEK AND LATIN

500. Special Topics. *Summer only* (3) Staff.

A. Seminar in Greek Literature. Intensive study of individual Greek authors or genres, varying from year to year in accordance with the students' needs;

B. Seminar in Latin Literature. Intensive study of individual Latin authors or genres, varying from year to year in accordance with the students' needs.

LATIN 510 T. The Programmed Latin Course. *Summer only* (3) Staff.

CLASSICAL CIVILIZATION

For the following courses, a knowledge of Latin or Greek is not required. Courses numbered in the 200's are open to *all* students of the College. Courses numbered in the 300's and 400's are open to *sophomores, juniors, and seniors*.

Classical Civilization 150. Freshman Seminar. *Fall* (3) Mr. Jones. Buried cities of Vesuvius: Pompeii, Herculaneum, and Stabiae.

Classical Civilization 205. Greek and Roman Mythology. (AS) *Fall and Spring* (3) Mr. Baron.

The origins and development of Classical mythology and heroic legend as religious belief, its relation to other mythologies, and its adaptation as literary and artistic symbol from Homer through the twentieth century A.D.

Classical Civilization 207. Greek Literature. (AS) *Fall* (3) Mr. Baron.

A survey of the literary developments of ancient Greece which have influenced the form and content of European literature down to the present day. Areas studied include epic and lyric poetry, tragedy and comedy, historiography and rhetoric, and the philosophical dialogue.

Classical Civilization 208. Latin Literature. (AS) *Spring* (3) Mr. Baron.

A survey of Latin literature: both the classical Roman adaptation of our inheritance from Greece and the development of native traditions from the days of the Roman Republic through the Middle Ages. Topics include Roman comedy, the Latin epic, Classical and medieval lyric, satire, and ancient and medieval prose forms.

Classical Civilization 217. Greek Archaeology and Art. (AS) *Fall* (3) Mrs. Reilly.

An archaeological consideration of the Minoan, Mycenaean, Archaic and Classical periods of Greek civilization. Architecture, sculpture, painting and the minor arts are included.

Classical Civilization 218. Roman Archaeology and Art. (AS) *Spring* (3) Mrs. Reilly.

The architecture, painting and sculpture of Hellenistic Greece and of Rome until the 4th c. AD. from the archaeological viewpoint. Byzantine art as found in Greece and Italy will also be included.

Classical Civilization 311, 312. Ancient History. (AS) *Fall and Spring* (3,3) Mr. Jones.

Ancient Civilization from prehistoric times to the downfall of the Roman Empire. The first semester deals with the ancient Orient and Greece; the second semester with Rome. This course is the same as History 301, 302.

Classical Civilization 331. Greek Philosophy (S) *Fall* (3) Mr. Fuchs.¹ *Prerequisites:* Two courses in Philosophy or consent of the instructor.

A critical examination of representative Greek philosophers with special emphasis on Plato and Aristotle. This course is the same as Philosophy 331.

Classical Civilization 401. Greek and Latin Epic. (S) *Fall or Spring* (3) Staff.

Careful reading, in English, of Homer's *Iliad* and *Odyssey*, Vergil's *Aeneid*, Lucan's *Pharsalia*. Discussion of the character and structure of the Classical epic and its influence on European epic and novel. This course is the same as Comparative Literature 301.

¹ Assistant Professor of Philosophy.

CLASSICAL CIVILIZATION

Classical Civilization 402. The Greek and Roman Historians. (S) *Fall or Spring* (3) Staff.

The study, in translation, of the major historians of Greece and Rome, including Herodotus, Thucydides, Livy, and Tacitus, with particular regard to content, literary and historical technique, and historical perspective.

Classical Civilization 403. Classical Tragedy and Its Influences. (S) *Fall or Spring* (3) Mr. Leadbeater.

Readings, in English, and discussion of the major works of Aeschylus, Sophocles, Euripides, and Seneca. Parallel readings in the theories of tragedy and of representative works, illustrating the influence of Classical Tragedy on subsequent literary history. This course is the same as Comparative Literature 305.

Classical Civilization 404. Ancient Comedy and Its Influences. (S) *Fall or Spring* (3) Mr. Leadbeater.

A study, in translation, of representative works of Aristophanes, Menander, Plautus, and Terence. Parallel readings in the theories of comedy and of representative works illustrating the influence of Ancient Comedy on subsequent literary history. This course is the same as Comparative Literature 306.

Classical Civilization 405. Later Greek Philosophy. (S) *Fall or Spring* (3) Mr. Leadbeater.

A study of the later aspects of Greek philosophy as they took form in Neo-Platonism and the Second Sophistic Movement. The course is intended to be an examination of Platonism as it developed in the philosophies of Plotinus, Iamblichus, Julian, and others. Emphasis will be placed on the mysticism of the age and the reaction of and influence on Christian thought as revealed in selected readings from the Church Fathers.

Classical Civilization 490. Special Topics in Classical Civilization. (S) *Fall or Spring* (3) Staff.

A study in depth of some particular aspect of Greco-Roman culture. This course is intended for the student who already has some background in Classical Civilization. The course may be repeated if the topic is basically different.

Classical Civilization 500T. The Classical Humanities in the High School curriculum. *Summer only* (3) Mr. Leadbeater.

HONORS STUDY

495, 496. Honors. *Fall and Spring* (3,3) Staff.

The Department of Classical Studies offers Honors Study in Greek or Latin as staff is available. Students admitted to this study will be enrolled in the course during both semesters of their senior year. The course comprises: (a) reading and discussion of selected authors in the language of the student's emphasis, Greek or Latin; (b) supervised reading of a special bibliography in the field of the student's major interests; (c) satisfactory completion by May 1, of a scholarly essay; and (d) satisfactory completion of a comprehensive oral examination in the field of Greek and Latin Literature.

COMPARATIVE LITERATURE

ASSOCIATE PROFESSOR LEADBEATER; ASSISTANT PROFESSORS HALLETT AND WIGGINS (*Chairman of the Committee*).

Courses in Comparative Literature fulfill Area and Sequence requirements in Area I. Students may complete a sequence in Comparative Literature by taking Comparative Literature 201, 202 and two of the courses on the 300 level listed below or any two advanced literature courses in the departments of Classical Studies, English, or Modern Languages. An interdisciplinary concentration in Comparative Literature is available upon petition to the Committee for Comparative Literature and the Committee for Interdisciplinary Concentrations.

201, 202 Concepts in Comparative Literature. (A) *Fall and Spring* (3,3) Mr. Leadbeater, Mr. Hallett, and Mr. Wiggins.

An introduction, through the critical examination of selected literary works of major importance from various periods, to the major modes and techniques of comparative literature. Modes such as genre, literary devices, and chronological development of literary concepts will be examined from a comparative point of view.

203, 204 The Literature of East Asia. (A) *Fall and Spring* (3,3) Mr. Canning.

A study of Chinese and Japanese literature in relation to major developments in East Asian society. Discussion and comparison of major political and social themes in both classical and modern works of literature.

301. Greek and Latin Epic and its Influence. (S) *Fall or Spring* (3) Mr. Baron. (Same as Classical Civilization 401)

Careful reading, in English, of Homer's *Iliad* and *Odyssey*, Vergil's *Aeneid*, and Lucan's *Pharsalia*. Discussion of the character and structure of the Classical Epic and its influence on European epic and novel.

302. Epic and Romance. (S) *Fall* (3) Mr. Wiggins. (Same as English 435)

An intensive study of the development of these major genres, with illustrative works drawn from ancient, Medieval and Renaissance authors.

303. The World Novel. (S) *Spring* (3) Mr. Meyers. (Same as English 436)

An intensive study of selected works of fiction primarily by European authors from the eighteenth century to the present.

304. Contemporary French Novel and its Influence. (S) *Spring* (3) Mr. Hallett. (Same as French 298)

A study, in English translation, of trends in the Modern French Novel and their influence on contemporary literature.

305. Classical Tragedy and Its Influences. (S) *Fall* (3) Mr. Leadbeater. (Same as Classical Civilization 403)

Readings, in English, and discussion of the major works of Aeschylus, Sophocles, Euripides, and Seneca. Parallel readings in the theories of tragedy and of representative works, illustrating the influence of Classical Tragedy on subsequent literary history.

306. Ancient Comedy and its Influences. (S) *Spring* (3) Mr. Leadbeater. (Same as Classical Civilization 404)

A study, in translation, of representative works of Aristophanes, Menander, Plautus, and Terence. Parallel readings in the theories of comedy and of representative works illustrating the influence of Ancient Comedy on subsequent literary history.

COMPARATIVE LITERATURE

307. Contemporary French Theatre and its Influence. (S) *Fall* (3) Mr. Coke. (Same as French 297)

A study, in English translation, of trends in Modern French theatre and their influence on contemporary drama.

401. Lyric Poetry. (S) *Fall and Spring* (3,3) Mr. Leadbeater and Mr. Wiggins.

An intensive study from a comparative point of view of the development of lyric poetry. Emphasis will be on lyric from the Classical through the Renaissance periods, although some lyric from other periods will be included as the needs of the course demand.

Economics

PROFESSOR SCHIFRIN (*Chairman of the Department*). ASSOCIATE PROFESSORS BAKER, BARRY, GARRETT, HAULMAN, MATTHEWS, and RUSHING. ASSISTANT PROFESSORS COUSINS,¹ FINIFTER, MOODY, and SANDERSON. INSTRUCTOR KURCHKO.²

The program in Economics is designed to offer courses of study that provide foundations for advanced work in Economics, for careers as economists after completion of the B.A. degree, and for enrollment in professional programs such as Law and Business.

REQUIREMENTS FOR CONCENTRATORS

Concentration in Economics requires a minimum of thirty semester hours of courses in Economics beyond Economics 101, 102. All concentrators are required to take the following courses:

- 303 Intermediate Economic Theory: Microeconomics
- 304 Intermediate Economic Theory: Macroeconomics
- 307 Principles and Methods of Statistics

Special programs may be arranged in which these required courses can be waived by permission of the Department.

The Department offers as Freshman Seminars introductory courses on contemporary economic issues and problems.

DESCRIPTION OF COURSES

101, 102. Principles of Economics. (A) *Fall and Spring* (3,3). This course is a prerequisite to all courses in Economics except 307. Staff.

An introduction to the analytical tools commonly employed by economists in the study of the determination of the composition of output, prices, and the aggregate level of economic activity. Problems related to these subjects are considered, and alternative courses of public policy are evaluated.

150. Freshman Seminar. *Fall and Spring* (3) Staff.

A survey of selected contemporary economic issues and problems, with an introduction to the methods of economic analysis useful in understanding them.

303, 304. Intermediate Economic Theory. (S) *Fall and Spring* (3,3) Mr. Barry, Mr. Moody, and Mr. Haulman. *Prerequisite:* Econ. 101, 102.

The first semester is devoted to the theory of resource allocation in a market economy. The second semester is devoted to the theory of national income determination.

307. Principles and Methods of Statistics. *Fall and Spring* (3) Mr. Moody and Mr. Baker.

A study of the principles and uses of frequency distribution, measures of central tendency and dispersion, statistical inference, sampling, correlation and regression analysis. *Two Class Hours, Two Laboratory Hours.*

311. Money and Banking. (S) *Fall* (3) Mr. Matthews, Mr. Barry, and Mr. Haulman. *Prerequisite:* Econ. 101, 102.

An analysis of the monetary system with emphasis upon determinates of the money supply and the relationship between money and economic activity.

412. Stabilization Policy. (S) *Spring* (3) Mr. Barry. *Prerequisites:* Econ. 101, 102, 304 or 311.

¹ 1972-1973

² Second semester, 1972-73

ECONOMICS

Analysis of stabilization policy with emphasis on the joint impact of monetary and fiscal policies with respect to the objectives of full employment, economic growth, and price stability.

421. Public Finance. (S) *Fall* (3) Mr. Baker. *Prerequisites:* Econ. 101, 102.

Theory and principles of public finance, with emphasis on federal, state, and local taxes and expenditures, the fiscal decision process, intergovernmental fiscal relations, and cost-benefit analysis.

431. Introduction to Mathematical Economics I. (S) *Fall* (3) Mr. Moody. *Prerequisites:* Econ. 101, 102.

A survey of mathematical techniques widely used in economics including topics in set theory, linear algebra, linear programming and game theory. Emphasis will be on the economic applications of these methods.

432. Introduction to Mathematical Economics II. (S) *Spring* (3) Mr. Moody. *Prerequisites:* Econ. 101, 102, 431.

The topics covered in this course are selected from among differential and integral calculus, optimization techniques and differential equations, with emphasis on the economic content and application of the techniques.

440. Economic History of the Western World. (S) *Fall* (3) Mr. Sanderson. *Prerequisites:* Econ. 101, 102, or permission of instructor.

A study of the development of the market and semi-market economies of the western world from preindustrial times through the early industrial periods. Also included is a comparative study of the growth of these economies through the nineteenth and twentieth centuries.

441. American Economic History. (S) *Spring* (3) Mr. Sanderson. *Prerequisites:* Econ. 101, 102, or permission of instructor.

A study of the growth of the American economy from the colonial period to the present. Special emphasis is placed on the use of quantitative methods in the study of economic history.

444. Regional Economic Growth and Planning: Emphasis on the South. (S) *Spring* (3) Mr. Garrett. *Prerequisites:* Econ. 101, 102.

A study of regional economic development with emphasis on the South. The course includes an analysis of systems of cities, metropolitan areas and small urban areas as separate subregions and their role in the contemporary growth of larger regions. Models of regional growth and institutionalism are combined to provide a better perspective for regional planning.

Economics 445—Urban Analysis. (S) *Fall* (3) Mr. Garrett. *Prerequisites:* Econ. 101, 102 and permission of instructor.

The course incorporates an interdisciplinary approach in analyzing contemporary urban problems. A model simulating the growth of an urban area is utilized throughout the course.

446. History of Economic Thought. (S) *Fall* (3) Mr. Haulman. *Prerequisites:* Econ. 101, 102.

The development of economic analysis with emphasis upon Classical and Marxian economics.

451. Labor Market Analysis. (S) *Fall* (3) Mr. Finifter. *Prerequisite:* Econ 101, 102.

An analysis of the empirical evidence and theories of labor demand and labor sup-

ECONOMICS

ply with special emphasis on wage differentials, the unemployment—inflation trade-off, the impact of labor unions on the economy, and manpower policy problems.

452. The Economics of Human Resources. (S) Spring (3) Mr. Finifter. *Prerequisite: Economics 101, 102.*

An examination of trends in poverty, income distribution, and manpower development policy. The concept of human capital is studied in detail, with special reference to education, health, and labor migration as human capital investments.

455. Population Economics. (S) Spring (3) Mr. Haulman. *Prerequisites: Econ. 101, 102.*

The study of the relationship of economics and population with a view toward analyzing the role of population change in models of economic growth and development and discussing the economic determinants of demographic behavior using models of economic decision-making.

461. Government and Business. (S) **The Enforcement of Competition.** Fall (3) Mr. Baker and Mr. Schifrin. *Prerequisites: Econ. 101, 102.*

An analysis of the factors that influence and determine business conduct and market performance. Special emphasis is given to the philosophy and features of the anti-trust laws and to the enforcement of market competition through their application.

462. Government Regulation of Business. (S) Spring (3) Mr. Baker and Mr. Schifrin. *Prerequisites: Econ. 101, 102.*

An analysis of the principles and purposes of government regulation of business in certain sectors of the economy where competition may not be workable, including public utilities, transportation, agriculture, defense procurement, and scientific research and development.

471. International Economics. (S) Fall (3) Mr. Matthews. *Prerequisites: Econ. 101, 102.*

This course develops the theory of international trade from the Mercantilists to the modern economists. The objective is to give the student basic knowledge of analytical tools used by economists in the study of international economic problems.

472. International Trade and Policies. (S) Spring (3) Mr. Matthews. *Prerequisites: Econ. 101, 102.*

This course analyzes historically problems in tariffs and other protectionist devices, the effect of economic development on the pattern of world trade, and problems in balance of payments equilibrium, foreign exchange, and international finance. Particular attention is focused on international economic developments since World War II.

482. Comparative Economic Systems. (S) Fall (3) Mr. Rushing. *Prerequisites: Econ. 101, 102.*

Primarily a study of the development and present structure of the Soviet economy, with comparative analysis of the Soviet and Western experiences.

490. Topics in Economic Policy. Fall and Spring (3) Staff. *Prerequisites: Concentration in Economics, Senior standing and permission of instructor.*

A directed readings course conducted on an individual or group basis on various topics in economic policy.

Topics in Government and Economic policy may be same as Government 490.

ECONOMICS

495, 496. Honors. *Fall and Spring* (3) Staff.

Advanced study on a tutorial basis the first semester. In the second semester each student undertakes independent research on a selected topic and presents an Honors Essay. Each Honors student is responsible for (a) the supervised reading of a selected list of books in economics; (b) satisfactory completion by May 1 of an original essay, or other scholarly projects in the field of economics; and (c) satisfactory performance on a comprehensive oral examination. A student who completes the Honors Essay but does not achieve Honors may be given credit for Economics 490.

English Language and Literature

PROFESSORS DOLMETSCH (*Chairman of the Department*), DAVIDSON, EVANS, JENKINS, McCULLEY, NEIMAN, and SMITH. ASSOCIATE PROFESSORS BALL, CONLEE, DAVIS, DONALDSON,¹ ELLIOTT, FEHRENBACH, MACCUBBIN, NETTELS,² SCHOLNICK, and WILLIS. ASSISTANT PROFESSORS BAUER, DAW,³ FREEMAN, HARRIS, HEACOX, MARLOW,⁴ MEYERS, PIKE, SAVAGE, SOUTHARD, WENSKA, AND WIGGINS. INSTRUCTORS CORNETTE,⁴ ELIAS, GREENE, PEIRCE.

THE PROGRAM IN ENGLISH

The Department of English Language and Literature provides numerous distinctive opportunities for the full humanistic development of the individual student, ranging from the development of skills in written communication through increased sensitivity to language and awareness of the aesthetic and intellectual enjoyments of literature to an understanding of the cultural values reflected in that literature.

The Department attempts to fulfill several specific obligations within the liberal arts program of the College. On behalf of the faculty as a whole, it provides formal instruction in the elements of English composition. In order to contribute effectively to the area and sequence components of the general curriculum, the Department also offers courses designed to introduce the student to the essential nature of literature and literary study. In addition, the rich and varied program of course offerings in English, American and comparative literatures, linguistics and writing is designed to meet the elective needs of a highly diverse group of students who are not English concentrators.

In its concentration program the Department aims to provide simultaneously for the needs of students who are seeking certification to teach in the public schools, of those who are preparing for graduate study in English, and of those who choose English simply because they enjoy the disciplined study of literature and language and respond to its humanizing influence or who find such study an appropriate liberating experience in advance of their entering upon professional studies in other fields, such as law, medicine, psychology and theology. In order to satisfy all of these particular needs at once, the Department has devised a single, unified program of concentration that affords the student unusual freedom in his choice of courses, teachers and learning experiences. The English concentrator is asked to satisfy a pattern of distribution in the Department rather than to take specific courses.

AREA AND SEQUENCE REQUIREMENTS

Area and sequence requirements in Area I may be satisfied by choosing courses in either literature or linguistics. Students are advised to follow one of the following patterns:

1. Literature: The area requirement would be met by two courses in the 200-level, excluding English 211. The Department strongly recommends that students begin with English 201, "The Art of Literature," and further recommends that the sequence requirement be met by two additional courses chosen from among those numbered above 300 which belong to the same group as the second course elected for the area requirement. Course groups in literature are indicated in the course descriptions by the following Roman numerals: I. (English Literature); II. (American Literature); III. (General Literature, including courses in Comparative Literature).

2. Linguistics: The area requirement would be met by English 211, "The Study of Language," and either 403 or 404. The sequence requirement would be met by choosing two additional courses having the Roman numeral designation IV (Linguistics).

¹ On leave-of-absence, 1972-73

² On leave-of-absence Fall, 1973

³ On leave-of-absence Spring, 1974

⁴ 1972-1973

ENGLISH LANGUAGE AND LITERATURE

REQUIREMENTS FOR CONCENTRATION

A concentration in English requires a minimum of 36 credits in departmental courses (exclusive of English 101) at least 27 of which must be in courses numbered 300 and above, including the following:

I. At least three courses (9 credits) surveying periods of literature, chosen from the group numbered English 312 to 364, inclusive.

II. At least one semester of study of a major author, chosen from among the following courses: English 413, 421, 422 or 426.

III. A Senior seminar, English 475. (A student who satisfactorily completes the Junior Honors seminar, English 494, is exempted from this requirement.)

Concentration courses are chosen by the student in consultation with a departmental advisor on the basis of the student's preparation, background, vocational expectations and further educational interests. A sound concentration program should include, in addition to the requisite courses in English, a coherent pattern of complementary courses in other departments and allied fields also chosen in consultation with the advisor.

DESCRIPTION OF COURSES

COLLEGE COURSES*

101. Writing. *Fall and Spring* (3) Staff.

Practice in writing under supervision, with frequent conferences. Required of freshmen who are not exempted by test scores or special examination and recommended for all. Sections limited to fifteen students each.

150. Freshman Colloquium. *Fall and Spring* (3) Staff.

Exploration of a limited topic in literature or in the relationship of literature to other fields. Sections limited to fifteen students each, with emphasis upon oral participation and critical writing. Seminar topics are announced in advance of each semester so that the student may choose his section on the basis of interest, background and academic goals.

INTRODUCTORY COURSES

The following courses are especially designed for freshmen and sophomores. Upperclassmen may be admitted to them only upon consent of the Department Chairman.

201. The Art of Literature. (A. I, II, III) *Fall and Spring* (3) Staff.

An introductory course in critical reading and writing aimed at developing the student's understanding and enjoyment of the communicative processes employed in the literary arts. This course should normally be taken before the student proceeds to other area or concentration courses in English.

203. English Literary Traditions: Medieval and Renaissance. (A. I) *Fall and Spring* (3) Staff.

A study of works representing various traditions of English literature from the Middle Ages to 1700.

(*In addition, in 1973-74 the Department will offer English 001,002, "A Study of English as a Second Language," as a non-credit course in the Evening College program in the Fall and Spring semesters, respectively. This continuous course is designed for foreign students who have difficulty with oral and written expression and is intended to improve the student's pronunciation, understanding of grammar and syntax, and reading comprehension.)

ENGLISH LANGUAGE AND LITERATURE

204. English Literary Traditions: The Eighteenth and Nineteenth Centuries. (A. I) *Fall and Spring* (3) Staff.

A study of works representing various traditions of English literature from the Augustan through the Victorian Ages (1700-1900).

207. Major American Writers. (A. II) *Fall and Spring* (3) Staff.

Study of five or six American authors, emphasizing each writer's conception of his situation and role in American society. One or more continuing themes may also be emphasized.

208. Contemporary Literature. (A. I, II, III) *Fall and Spring* (3) Staff.

Reading and interpretation of selected contemporary works in more than one genre. *Prerequisite:* English 201.

211. The Study of Language. (A. IV) *Fall and Spring* (3) Staff.

An introduction to the scientific study of the elements of language, including sound and writing systems, grammatical approaches, social and regional language differences, and the backgrounds of American English. No prerequisites.

ADVANCED COURSES

301. Advanced Writing. *Fall and Spring* (3) Staff.

This course provides practice in writing papers of various types under supervision, emphasizing expository techniques. Sections limited to fifteen students each.

302. Creative Writing. *Fall and Spring* (3) Mr. Heacox

This course provides an opportunity for the student to develop his abilities in imaginative writing of various types, especially fiction and poetry, under supervision. Sections limited to fifteen students each. *Prerequisite:* English 101 or exemption from the degree requirements in writing.

[The student should have satisfactorily completed at least one 200-level English courses before enrolling for any of the following courses.]

312. Medieval Literature. (S. I) *Spring* (3) Mr. Davidson.

A survey of Old and Middle English literature.

323. The English Renaissance. (S. I) *Fall* (3) Mr. Fehrenbach.

A survey of the poetry, prose, and drama of Tudor England, including selected works of More, Sidney, Spenser, Marlowe, and Shakespeare.

324. The Early Seventeenth Century. (S. I) *Spring* (3) Mr. Evans.

A survey of poetry, prose, and dramatic forms from John Donne and Ben Jonson to 1660, including early poems of Milton and Marvell.

331. English Literature, 1660-1744. (S. I) *Fall* (3) Mr. Maccubbin.

A survey of the period, including a major novel but emphasizing other genres and their cultural milieu. Emphasis upon satire.

332. English Literature, 1744-1798. (S. I) *Spring* (3) Mr. Maccubbin.

A survey of the period, including all genres and their cultural milieu. Emphasis upon "sensitivity."

341. The English Romantic Period. (S. I) *Fall* (3) Mr. Elliott.

A survey of the dominant ideas and conventions of English romanticism as expressed primarily through the major poets and essayists of the period between 1798 and 1832.

ENGLISH LANGUAGE AND LITERATURE

342. The Victorian Age. (S. I) *Spring* (3) Mr. Neiman.

A survey of the major writers of England during the reign of Victoria. Emphasis is upon the social and intellectual issues as expressed primarily by leading poets and essayists from Carlyle to Hardy.

352. Twentieth Century British Literature. (S. I) *Spring* (3) Mr. Heacox.

A survey of British writing from the period of the Celtic Renaissance to the present.

361. American Literature to 1836. (S. II) *Fall* (3) Mr. Wenska.

A survey of American literature from its beginning to the rise of Transcendentalism, emphasizing such writers as Edward Taylor, the Mathers, Edwards, Byrd, Franklin, Freneau, C. B. Brown, Cooper, Irving and Poe.

362. The American Renaissance. (S. II) *Fall* or *Spring* (3) Mr. Davis.

A survey of American writing in the mid-nineteenth century, emphasizing the writers of the "Concord Group," Hawthorne, Melville, Whitman, Dickinson and the Southwest Humorists.

363. American Literature, 1865-1920. (S. II) *Fall* or *Spring* (3) Mr. Donaldson.

A survey of American literature from the "Gilded Age" to the end of the First World War, emphasizing such writers as "Mark Twain," Howells, James, Stephen Crane, Norris, Dreiser and the Regionalists.

364. American Literature since 1920. (S. II) *Spring* (3) Mr. Dolmetsch and Mr. Donaldson.

A survey of American literature from the rise of the "Lost Generation" and the Southern Renaissance to the present, emphasizing such writers as Hemingway, Fitzgerald, Faulkner, Steinbeck, Frost, O'Neill and later dramatists.

(N.B. In the following courses some background in the subject-matter of the relevant 200- and 300-level courses is assumed.)

***401, 402. Seminar in Creative Writing.** *Fall and Spring* (3,3) Mr. Jenkins.

The course is intended for the student who has demonstrated some talent for creative writing. He is encouraged to develop his individual interests and creative capacities. Extensive practice in the several types of writing. Consent of instructor required for enrollment.

403. History of the English Language. (AS. IV) *Fall* (3) Mr. Ball.

A study of the history of the English language from Anglo-Saxon to the present. Some attention is given to American English and other variants.

404. Modern Grammar. (AS. IV) *Fall* or *Spring* (3) Mr. Ball, Mr. Conlee and Mr. Southard.

An examination of structural grammar, transformational and other grammars.

405. Descriptive Linguistics. (S. IV) *Fall* (3) Mr. Southard.

A study of contemporary linguistic theory and methods of language analysis. Same as Anthropology 430. *Prerequisite:* One linguistics course or consent of instructor.

406. Historical Linguistics. (S. IV) *Spring* (3) Mr. Southard.

A study of the principles, methods and major results of historical reconstruction, emphasizing Indo-European languages but with some attention to non-Indo-European as well. Same as Anthropology 440. *Prerequisite:* English 405 (Anthropology 430) or consent of the instructor.

ENGLISH LANGUAGE AND LITERATURE

408. Literary Criticism. (S. I, II or III) *Fall or Spring* (3) Mr. Neiman.

Major texts in the tradition of literary criticism from Aristotle to modern times, tracing the history of critical concerns in relation to the history of ideas.

409. Old English. (S. I, IV) *Fall* (3) Mr. Davidson.

An introduction to Old English, including elementary grammar and phonology and the reading of prose and short poems; collateral readings in the history and culture of the period. (Not offered, 1973-74.)

410. Beowulf. (S. I) *Spring* (3) Mr. Davidson. *Prerequisite:* English 409 or the permission of the instructor. (Not offered, 1973-74.)

413. Chaucer. (S. I) *Fall* (3) Mr. Conlee and Mr. Davidson.

A study of Chaucer's *Canterbury Tales* and *Troilus and Criseyde*.

421. Shakespeare. (S. I) *Fall* (3) Mr. Savage.

An intensive study of selected histories and comedies.

422. Shakespeare. (S. I) *Spring* (3) Mr. Fehrenbach.

An intensive study of the major tragedies and the "problem" comedies.

426. Milton. (S. I) *Spring* (3) Mr. Savage.

An intensive study of Milton's poetry and prose, with due attention to the religious, political, and literary milieu in which Milton wrote.

429. English Renaissance Drama. (S. I) *Fall* (3) Mr. McCulley.

A study of drama in England, including conventions and currents of ideas, from the origins to the closing of the theatres in 1642, with emphasis on the works of Christopher Marlowe, Ben Jonson and John Webster.

435. Epic and Romance. (S. I, III) *Fall* (3) Mr. Wiggins.

A study of the development of these major genres, with illustrative works drawn from ancient, Medieval and Renaissance, as well as English and Continental authors. Same as Comparative Literature 301.

436. The World Novel. (S. III) *Spring* (3) Mr. Meyers.

A study of selected works of fiction primarily by European and non-Western authors from the eighteenth century to the present. Same as Comparative Literature 302.

439. English Novel to 1832. (S. I) *Fall* (3) Mr. Smith.

Survey of the development of English prose fiction from its beginnings in the Elizabethan period through the novels of Austen.

440. English Novel, 1832-1900. (S. I) *Spring* (3) Mr. Ball.

Survey of the English novel from Dickens to the early twentieth century.

451. Modern Poetry. (S. I, II) *Fall or Spring* (3) Mrs. Freeman and Mr. Willis.

Modern English and American poetry and its development, with reading, interpretation and discussion of the verse of Yeats, Pound, Eliot, Auden, Stevens, Thomas, and others.

452. Modern Fiction. (S. I, II) *Fall or Spring* (3) Mr. Jenkins and Miss Nettels.

Reading, analysis and discussion of the principal American and British fiction writers from 1890 to the present, chosen to illustrate contemporary tendencies in matter and technique.

ENGLISH LANGUAGE AND LITERATURE

454. Modern Drama. (S. I, II, III) *Spring* (3) Mr. McCulley.

A study of selected important plays of the English, Irish and American theatres since Ibsen.

460. Black Literature in America. (S. II) *Fall* (3) Miss Harris.

A study of selected works by the leading Black American writers, with emphasis upon their ethnic concerns and their contributions to the general development of American literary culture. *Prerequisite: one course in American literature.*

‡465. Special Topics in Literature. *Fall or Spring* (3) Staff.

Intensive exploration at an advanced level of a limited topic in English, American or international literature or in the relations between literature and other disciplines. Topics to be offered will be announced in the Spring of the year before that in which they are to be scheduled. Consent of the Department Chairman required for enrollment.

‡475. Senior Seminar in English. *Fall and Spring* (3) Staff.

A study in depth of a limited literary topic. Students write and present complex research papers for critical discussion. Open only to seniors. Non-concentrators may enroll upon consent of the Department Chairman.

‡480. Independent Study in English. *Fall or Spring* (3) Staff.

A tutorial course on a topic agreed upon by the student and instructor and approved in advance by a departmental committee. Open only to concentrators who have completed at least half of the concentration requirements.

HONORS STUDY

494. Junior Honors Seminar. *Spring* (3) Mr. Fehrenbach.

A study in depth of a limited literary topic, emphasizing student discussion and the preparation of critical papers. This course is restricted to concentrators planning to enroll in Senior Honors, and is a substitute for the required senior seminar.

‡495-496. Honors. *Fall and Spring* (3,3) Staff.

Students admitted to Honors Study in English will be enrolled in this course during both semesters of their senior year. The course comprises (a) supervised reading in the field of the student's major interest; (b) the preparation and presentation by May 1 of an Honors Essay based on the student's own research upon a topic approved in advance by the departmental Honors committee; and (c) satisfactory performance in a comprehensive oral examination in the field of the student's major interest.

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in English, write to the Director, Graduate Study in English for a Graduate Catalog.

Fine Arts

PROFESSORS NEWMAN (*Chairman of the Department*), ROSEBERG, and THORNE. ASSOCIATE PROFESSORS KORNWOLF and COLEMAN. ASSISTANT PROFESSORS CHAPPELL, and CRANE. INSTRUCTOR HELFRICH. LECTURERS HOUGHLAND and WINTER.

There are two concentrations in the Department of Fine Arts, one for students primarily interested in the History of Art, the other for students primarily interested in Studio work. In each case the student is expected to complete F.A. 111-112 and F.A. 201-202. It is to the advantage of the student, particularly those concentrating in Art, to have completed these courses by the end of the sophomore year.

A wide variety of programs can be developed from the offerings of the department to suit individual needs of concentrators. Students interested in secondary school teaching of Art should elect the concentration in Art.

REQUIREMENTS FOR CONCENTRATION

Students concentrating in Fine Arts should choose between a concentration in History of Art or in Art.

Students concentrating in the History of Art are required to take F.A. 111, F.A. 112, F.A. 201, F.A. 202, F.A. 401 or 495-496 and fifteen additional credits in the History of Art.

Students concentrating in Art are required to take F.A. 111, F.A. 112, F.A. 201, F.A. 202, and eighteen additional studio credits at least six of which must be at the 400 level, and six additional credits in History of Art.

DESCRIPTION OF COURSES

HISTORY OF ART COURSES

150. Freshman Seminar. *Spring* (3) Mr. Chappell.

An introduction to the History of Art.

201. Survey of History of Art. *Fall* (3) Mr. Newman.

The study of Ancient and Medieval Art. Illustrated lectures, readings, and papers.

202. Survey of the History of Art. *Spring* (3) Mr. Newman, Mr. Chappell

The study of Western Art from the Renaissance to the Present. Illustrated lectures, readings, and papers.

307. Modern Art. *Fall* (3) Mr. Kornwolf.

History of Modern Architecture, Sculpture and Painting from circa 1780-1880.

308. Modern Art. *Spring* (3) Mr. Kornwolf.

History of Modern Architecture, Sculpture and Painting from circa 1880 to World War II.

401. Problems in Twentieth Century Art. *Fall* (3) Mr. Kornwolf.

A study of contemporary problems in planning, architecture, painting, and sculpture. Required of all History of Art Majors.

402. Seminar in Twentieth Century Art. *Spring* (3) Mr. Kornwolf.

Special topics in Modern Art, with a major research paper.

403. Early Medieval Art. *Fall* (3) Mr. Newman.

A study of certain aspects of Medieval Architecture, Sculpture, and Painting in Early Christian, Byzantine, Barbarian, Carolingian, and Romanesque Art.

FINE ARTS

404. Late Medieval Art. *Spring* (3) Mr. Newman.

Primary attention is devoted to the development of High Gothic Art and to Late Medieval Painting.

405. Renaissance and Mannerist Architecture. *Fall* (3) Mr. Kornwolf.

A study in depth of the major developments in European Architecture of the 15th and 16th centuries.

405. Renaissance Art in Italy. *Fall* (3) Mr. Chappell.

A study in depth of the Painting of Italy from the 14th to the 16th century.

408. Primitive Art. *Spring* (3) Mr. Roseberg.

Study of Art of Primitive People: Pre-Columbian American Art, Northwest American Indian Art, Melanesian and Polynesian Art, African Art, and the Art of Pre-Classical civilizations. (To alternate with 410).

409. Indian Art. *Fall* (3) Mr. Roseberg.

A study of the art, culture, and religious background of India, including the influences of Indian culture on other Asian countries such as Cambodia, Thailand, Java, and Tibet.

410. Chinese and Japanese Art. *Spring* (3) Mr. Roseberg.

A study of the art and architecture of China and Japan.

451. Colonial American Architecture. *Fall* (3) Mr. Thorne. *Prerequisites:* 201, 202, or 405.

452. Colonial American Painting. *Spring* (3) Mr. Thorne. *Prerequisite:* 202, 406, or 454.

453. Northern Renaissance Art. *Fall* (3) Mr. Chappell. *Prerequisite:* 201, 202, or 2 upper level History of Art courses.

454. Baroque Painting. *Spring* (3) Mr. Chappell. *Prerequisite:* 201, 202, or 2 upper level History of Art courses.

455. Baroque Architecture. *Spring* (3) Mr. Kornwolf.

A study in depth of the Baroque movement in architecture and the reactions to it in the 17th and 18th centuries.

460. Research Problems in the History of Art. (3) Staff.

Individual study on selected problems. *Prerequisite:* 201, 202, and four additional courses in the History of Art.

495-496. Senior Honors in Fine Arts. *Fall and Spring* (3,3) Staff.

STUDIO ART COURSES

111. Basic Design I. *Fall and Spring* (3) Staff.

Fundamentals of Two Dimensional Design. A series of lectures and studio problems on the elements of two dimensional design, including the illusion of three dimensions on the picture plane, line, shape, texture and color. *Six Studio Hours.*

112. Basic Design II. *Fall and Spring* (3) Staff.

Fundamentals of Three Dimensional Design. A series of lectures and studio problems dealing with the elements of three dimensional design, including compositions in relief and in the round. *Six Studio Hours.*

FINE ARTS

311. Drawing (3). Mr. Coleman.

A semester course in the problems of drawing. *Prerequisite: 111 or consent of the instructor. Six Studio Hours.*

312. Watercolor (3). Mr. Coleman.

A course exploring the varied possibilities of watercolor as expressive medium. *Six Studio Hours.*

313. Architectural Design I. Fall (3) Mr. Houghland.

The Discovery of Architecture through Design, with emphasis on basic design vocabulary: Drafting, Perspective, Shades and Shadows, Scale, and Proportion. *Prerequisite: 111, 112, or consent of the instructor. Six Studio Hours.*

314. Architectural Design II. Spring (3) Mr. Houghland.

The investigation of the role of an architect with specific design problems, and the development of presentation techniques. *Prerequisite: 313. Six Studio Hours.*

315. Painting I. Fall (3) Mr. Thorne.

The production of original work in oil, acrylic, and mixed media. *Prerequisite: 111, 112 or consent of the instructor. Six Studio Hours.*

316. Painting II. Spring (3) Mr. Thorne.

A continuation of 315. *Prerequisite: 315 or consent of the instructor. Six Studio Hours.*

317. Sculpture I. Fall (3) Mr. Roseberg.

A course in the use of the sculptor's tools and materials in the production of original work, including modelling in clay, plaster casting, direct building in plaster. Five specific sculpture problems are to be completed during the course or during both semesters. *Prerequisite: 111, 112 or consent of the instructor. Six Studio Hours.*

318. Sculpture II. Spring (3) Mr. Roseberg.

Continuation of 317. Development of original designs from preliminary sketch to completed work. *Prerequisite: 317 or consent of the instructor. Six Studio Hours.*

321. Ceramics I. Fall (3) Mr. Crane.

Studio problems in ceramic art, including hand building, wheel work, glazes, and kiln firing. *Prerequisite: 111, 112 or consent of the instructor. Six Studio Hours.*

322. Ceramics II. Spring (3) Mr. Crane.

Original work in clay, the making of glazes, various kiln firing procedures. *Prerequisite: 321 or consent of the instructor. Six Studio Hours.*

323. Graphics I. Fall (3) Mr. Helfrich.

After the student experiences relief, intaglio and serigraph printing he will choose one of the methods for extended exploration. *Prerequisite: 111, 112 or consent of the instructor. Six Studio Hours.*

324. Graphics II. Spring (3) Mr. Helfrich.

Within one of the following areas, relief, intaglio, or serigraph the student will explore the multiple potential of an area as a means of original visual expression. *Prerequisite: 323 or consent of the instructor. Six Studio Hours.*

441. Advanced Studio I. (3) Staff.

Advanced work in all media. May be repeated. *Prerequisite: Two 300 courses in one media. Six Studio Hours.*

FINE ARTS

442. Advanced Studio II. (3) Staff.

Advanced work in all media. *Prerequisite: 441 or consent of the instructor. May be repeated. Six Studio Hours.*

All work produced by the students of the studio classes remains the property of the College of William and May until released by the appropriate faculty member in charge. The College will not be responsible for theft or damage to such works.



Geology

PROFESSORS GOODWIN (*Chairman of the Department*), and BICK, ASSOCIATE PROFESSORS CLEMENT and JOHNSON, ASSISTANT PROFESSOR THOMAS.

The program of the Department of Geology is designed to provide each concentrator with a strong, broad background in geology and yet is sufficiently flexible to allow a student freedom to follow his or her own interests. This is accomplished by requiring every concentrator to take a core of six courses and then providing an opportunity for each student to choose the remaining three courses which comprise his concentration. Ample opportunity is available for independent student research and the department considers such research to be an integral part of its curriculum.

The geologic setting of Williamsburg enhances the program in geology and offers a wide variety of areas for field studies. Situated on the Coastal Plain with its excellent exposures of sediments and fossils, the College is only fifty miles from the fall zone beyond which occur igneous and metamorphic rocks of the Piedmont. The Blue Ridge and Valley and Ridge areas are within a three hour drive. Thus the field study area includes all major rock types and representatives of most geologic periods from Precambrian rocks to modern sediments.

REQUIREMENTS FOR CONCENTRATION

A concentration in Geology requires a minimum of thirty three semester hours of courses in Geology beyond Geology 101, 102. A concentrator's program consists of two parts:

- 1) A core of six courses totaling twenty four hours which must be taken by all concentrators. These six courses are: Geology 201, 202, 301, 302, 401 and 402.
- 2) Three additional courses totaling nine hours which may be selected from among the following courses: Geology 303, 304, 306, 403, 404, 405, 406 and 407.

Geology courses which will not be counted toward the concentration are Geology 101, 102, 203, 305 and 308.

Both the AB and BS degrees will be granted. In order to qualify for the BS, in addition to the above program a student must satisfy the general catalog requirements for the BS.

It is strongly recommended that a student who wishes to pursue geology on the professional level take the following courses: Geology 403, Physics 101, Chemistry 103, 102, and Mathematics 111, 112. Graduate schools also usually require a reading knowledge of French, German or Russian.

Geology 101-102 or permission of instructor is required for all 300 and 400 level Geology courses.

DESCRIPTION OF COURSES

101-102. Earth Processes. (A) *Fall and Spring* (4,4) Mr. Goodwin, Mr. Thomas and Staff.

Processes of the hydrologic and rock cycles, and their influence on the composition, structure, and evolution of the earth. Voluntary field trips. Three Class Hours, One Pre-Laboratory Hour, Two Laboratory Hours.

150. Freshman Colloquium. *Fall or Spring* (3) Mr. Johnson.

Various special topics in Geology. This course does not count toward concentration, area, or sequence requirements.

201. Mineralogy. (S) *Fall* (4) Mr. Clement.

An introduction to crystal chemistry and crystallography. Identification of common minerals by their physical properties. Introduction to X-ray diffraction and petrographic techniques. Three Class Hours, Three Laboratory Hours.

GEOLOGY

202. Igneous and Metamorphic Petrology. (S) *Spring* (4) Mr. Clement.

Mineral and rock genesis in the igneous and metamorphic environments. A study of hand specimens and thin sections, structures, textures, and aerial distribution. Field Trips. Three Class Hours, Three Laboratory Hours.

203. Physical Geography. *Fall or Spring* (3) Mr. Bick.

An introduction to physical geography. Topics include earth-sun relationships, energy balance, atmospheric and oceanic circulation, weather elements, climates, and geomorphic processes.

301. Sedimentary Petrology. (S) *Fall* (4) Mr. Thomas.

The petrology of sedimentary rocks including the formation, transport, deposition and post-depositional aspects of sediments. Interpretation of sedimentary rocks utilizing hand specimens, field relationships, thin-sections and quantitative laboratory techniques will be stressed. Field Trips. Three Class Hours, Three Laboratory Hours.

302. Paleontology. (S) *Fall* (4) Mr. Johnson.

The taxonomy of fossil organisms and the role of fossils in the study of organic evolution and the time relations of rock sequences. The laboratory stresses invertebrate morphology and quantitative measurement of local marine fossils. Field Trips. Three Class Hours, Three Laboratory Hours.

303. Geology of the United States. (S) *Fall* (3) Mr. Bick.

Descriptive treatment of the major aspects of the geology of the physiographic regions of the conterminous United States. Major emphasis is on the stratigraphy, structure, and development of each region. Two weekends will be devoted to field trips.

304. Geomorphology. (S) *Spring* (3) Mr. Thomas.

A descriptive and quantitative study of landform evolution and modification with respect to climate, drainage basin analysis, soils, and weathering. Attention will be paid to the development of current ideas and interpretation of aerial photographs and maps.

305. Environmental Geology. (S) *Spring* (3) Mr. Johnson.

An introduction to the causes and extent of air and water pollution, and to methods of preventing, reducing, or eliminating problems relating to ground and surface water, air, and solid waste.

306. Marine Geology. (S) *Spring* (3) Mr. Thomas.

An introduction to the history and development of concepts relating to the physical processes acting in the marine environment today. The impact of man will be emphasized. Individual concepts are to be integrated into the broader ideas of oceanic circulation patterns and plate tectonics. (Not offered in 1973-74).

308. Economic Geology. (S) *Fall* (3) Mr. Clement.

The origin, distribution, production, utilization and economics of metallic and non-metallic mineral resources.

401. Structural Geology. (S) *Fall* (4) Mr. Goodwin.

Theoretical, experimental, and field study of deforming forces and their effects on earth materials. Field Trips. Three Class Hours, Three Laboratory Hours.

402. Historical Geology. (S) *Spring* (4) Mr. Bick.

The principles of geologic historical reconstruction. Emphasis is on stratigraphic principles and synthesis with examples from the United States. Three Class Hours, Three Laboratory Hours.

GEOLOGY

403. Quantitative Geologic Models. (S) *Fall* (3) Mr. Bick.

The probabilistic basis of geologic processes and its application to geologic hypotheses through quantitative testing of conceptual models. (Not offered in 1973-74).

404. Paleocology. (S) *Spring* (3) Mr. Johnson.

The study of the relationship between fossil organisms and the interpretation of ancient environments from the fossil record. Field Trips. Two Class Hours, Three Laboratory Hours.

405. Petrography. (S) *Fall* (3) Mr. Clement. *Prerequisite: Geology 202.*

An introduction to the theory and use of the polarizing microscope. Two Class Hours, Three Laboratory Hours. (Not offered in 1973-74).

406. Independent Research. *Fall or Spring* (3) Staff.

A course for seniors affording an opportunity for individual research under the supervision of a faculty member.

407. Senior Seminar. *Spring* (3) Mr. Goodwin.

Discussions and readings on contemporary problems in geology. When possible, problems will be studied in the context of the Appalachian Mountain system.

GEOGRAPHY

Those interested in geography can prepare themselves for further study in the field by selecting suitable courses from among the following while concentrating in a discipline allied to geography:

Physical Geography

Geology 203—Physical Geography

Geology 305—Environmental Geology

Economic Geography

Anthropology 304—Primitive Economic Systems

Geology 308—Economic Geology

Human Geography

Anthropology 202—Cultural Anthropology

Anthropology 314—Indians of North America

Anthropology 417-2—Tropical Ecology

Sociology 349—Human Geography

Regional Geography

Anthropology 323—Peoples and Cultures of South America

Anthropology 330—Peoples and Cultures of the Caribbean

Anthropology 331—Peoples and Cultures of Africa

Anthropology 340—Peoples and Cultures of Insular Southeast Asia

Anthropology 342—Peoples and Cultures of Mainland Southeast Asia

Anthropology 344—Peoples and Cultures of Oceania

Government

WILLIAM WARNER MOSS, PROFESSOR OF GOVERNMENT, EMERITUS. PROFESSORS HAMILTON (*Chairman of Department*), EDWARDS, KIM, MORROW,¹ and ROHERTY.² ASSOCIATE PROFESSORS BAXTER, GRAYSON, SMITH and WARD. ASSISTANT PROFESSORS CLAYTON,³ DAMON,³ DE WEYDENTHAL,⁴ FARRELL,⁶ MIRI, RIGELMAN, and TEDIN.⁵

THE GOVERNMENT PROGRAM

The Government concentration consists of forty-two (42) credits of coherently related work selected by the student in consultation with his departmental advisor. Thirty-three (33) credits must be taken in the Department of Government. Each concentrator must take Government 201 and 202 and do a minimum of three (3) hours of course work in each Core Area of the concentration. The four Core Areas are (I) Political Philosophy, (II) Comparative Government and Politics, (III) International Politics, and (IV) American Government, Politics, and Administration. At least three (3) hours of course work must be done at the 400 level. Concentrators are admitted to Honors in Government with the permission of the Department.

Nine (9) credits in related courses are required. With the exception of History 201, 202 all related work must be at the 300 or 400 level and have the approval of one's advisor. It is recommended that concentrators carry their foreign language study beyond the minimum requirement for distribution.

DESCRIPTION OF COURSES

150. Freshman Seminar. *Fall and Spring* (3) Staff.

Topics to be announced.

Government 201, 202. Introduction to Government and Politics. (A) *Fall and Spring* (3,3) Staff.

The first semester is a general introduction to American politics. The second semester is a consideration of such perennial questions of politics as freedom, authority, power, community, and leadership.

Core Area I: Political Philosophy

303, 304. Survey of Political Philosophy. [AS] *Fall and Spring* (3,3) Mr. Roherty and Mr. Smith.

The course is developed around two themes, the *classical tradition* and the *modern tradition* in political philosophy. In the first semester the political works of Plato and Aristotle are taken as the standards of the classical tradition. Selected works of medieval Christian writers are also included. Machiavelli and Hobbes define the *modern tradition* as this is taken up in the second semester. The works of Locke, Rousseau, and Burke complete the course.

305. Contemporary Political Philosophy. (A,S) *Fall or Spring* (3) Mr. Rigelman and Mr. Smith.

An examination of various approaches to Political Philosophy from the late nineteenth century to the present.

¹ On leave of absence 1973-74

² Chairman of Department, 1972-1973

³ On leave of absence 1973-1974

⁴ On leave of absence first semester 1973-1974

⁵ 1973-1974

⁶ First semester, 1973-1974

GOVERNMENT

401. American Political Thought. (S) *Fall* (3) Mr. Smith.

Basic problems of political theory will be viewed from the perspective of the American experience.

405. Studies in Political Philosophy. (S) *Fall or Spring* (3) Mr. DeWeydenthal, Mr. Rigelman, Mr. Smith.

This course will examine a particular theme or problem such as the following: political development and political community, authority and freedom, utopia and anti-statism.

412. Empirical Political Theory. (S) *Spring* (3) Mr. Baxter.

A survey of several different approaches to the development of theories of politics through empirical research. Structured research problems will be used to introduce students to the logic and methods of empirical research and to illustrate the relation of such research to formal theories. Individual projects will be required.

Core Area II: Comparative Government and Politics

311, 312. Comparative Government. (A,S) *Fall and Spring* (3,3) Miss Hamilton, Mr. Baxter and Mr. Grayson.

A comparative study of institutions and processes of government. Historical, cultural, social and economic factors will be given considerable attention. In the first semester, countries of western Europe will be considered with emphasis on England and France. In the second semester, selected governments of nonwestern nations will be analyzed.

334. Soviet Political System. (A,S) *Fall* (3) Mr. DeWeydenthal.

A study of the contemporary political system of the Soviet Union with emphasis on potentially dynamic aspects of its socio-economic development as contrasted with the stability of historically determined structural patterns of political control. Attention will be given to the international position of the Soviet Union and a comparison with selected Western political systems will be attempted.

335. Comparative Communist Systems. (A,S) *Spring* (3) Mr. DeWeydenthal.

A comparative analysis of political and ideological problems confronting established communist systems in contemporary societies. Special attention will be paid to the growing conflicts between different structures of authority, the role of ideology in a changing environment, and the appearance of dissent ranging from revolts of students and intellectuals to doctrinaire rejections of reforms.

336. The Far East. (A,S) *Fall* (3) Mr. Kim.

A survey of the national and international politics of China, Japan and Korea. After a preliminary view of Far Eastern political and social traditions, this survey examines the manner in which these countries responded to the Western impact. Major attention will be given to the government and politics of Communist China and post-war Japan.

337. Politics in Africa. (A,S) *Fall* (3) Mr. Noisin.

A study of selected nations of Africa south of the Sahara. Emphasis will be placed on phenomena such as the rise of nationalism, the development of African party and governmental systems, and the role of Africa in international politics.

338. Latin American Politics and Government. (A,S) *Spring* (3) Mr. Grayson.

A comparative analysis of the types of government of selected Latin American nations. Appropriate consideration will be given to current conditions and to such prob-

GOVERNMENT

lems of general political development as recruitment and socialization, communication and articulation, interest, aggregation and decision-making.

410. British Government and Politics. (S) *Spring* (3) Mr. Ward. *Prerequisite:* *Government 311* or consent of instructor.

A study of political institutions and political behavior in the United Kingdom and Eire. Special attention is given comparisons with the United States and the parliamentary democracies of the Commonwealth.

411. French Government and Politics. (S) *Spring* (3) Miss Hamilton. *Prerequisite:* *Government 311* or consent of Instructor.

A study of political institutions and political behavior in post-war France. Emphasis will be placed on problems related to political and economic modernization.

416. Revolution and Politics. (S) *Fall or Spring* (3) Mr. Grayson.

Recent social science theories dealing with motivation of mass leaders, economic and social conditions underlying mass behavior, and use of propaganda, violence and symbols to recruit followers. The Russian, Mexican, Bolivian and Cuban revolutions will be studied along with Fascism, Peronism, and contemporary urban terrorist movements.

431, 432. Comparative Political Systems. (S) *Fall and Spring* (3,3) Mr. Baxter. *Prerequisite:* *Government 311, 312* or consent of the instructor.

A comparative approach to the study of politics. First Semester: Scope and methods of comparative political analysis; individual students prepare and present research proposals. Second Semester: Students execute research proposals, present intermediate and final reports.

Core Area III: International Politics

323, 324. International Relations. (A,S) *Fall and Spring* (3,3) Mr. Ward and Mr. Kim.

The theory and practice of International Politics. During the first semester the course will consider the international system of states and the bases of national power. The second semester will be a study of American foreign policy with an emphasis of the process of policy formulation. Selected foreign policy problems will be considered.

325. International Organization. (A,S) *Spring* (3) Mr. Kim.

A study of the development of the structures and procedures of international organization, and of the methods for pacific settlement of international disputes. Special attention will be given the League of Nations and the United Nations and the gains and failures of these organizations.

436. Contemporary International Relations of East Asia. (S) *Spring or Fall* (3) Mr. Kim.

Analysis of postwar problems in international relations of the Far East. Topics include: US-Soviet rivalry in East Asia; US role in the democratization of Japan and Korea; Soviet influence on China and North Korea; the emergence of China and its impact on the international relations of Asia; recent problems in US relations with East Asia; and problems of divided Korea.

Core Area IV: American Government, Politics, and Administration

306. Political Parties. (A,S) *Spring* (3) Mr. Damon.

An analysis of the nature, sources, and organization of political power, and of the factors governing its conquest and surrender. The course deals chiefly with American

GOVERNMENT

politics but makes comparisons with politics of other countries. Special attention is given the problem of analyzing and reporting political situations.

351. Introduction to Public Administration. (A,S) *Fall* (3) Mr. Morrow.

Policy-making and administration in government agencies. This course analyzes comparative administrative systems in the United States with emphasis on decision-making structures, constituency groups, and policy outputs.

353. The Politics of States and Localities. (A,S) *Spring* (3) Mr. Miri.

An examination of the institutions and processes of government and politics in American states and localities. Relationships among national, state, and local governments will be analyzed in the context of a federal system.

371, 372. American Politics. (A,S) *Fall and Spring* (3,3) Mr. Damon, Mr. Edwards.

The political process at the national level, including such topics as organization and recruitment, governmental decision-making, relationships among departments, and political parties and leadership. The first semester is concerned with the executive and legislative branches; the Supreme Court is considered in the second semester.

373. American Civil Liberties. (A,S) *Fall or Spring* (3) Mr. Edwards.

This course is an intensive study of the rights of Americans as guaranteed by the Constitution. The changing character of civil liberties problems in the United States will be stressed with attention given to the legal, historical and political context of the cases studied. Class discussion and reports will be emphasized.

454. The Politics of Metropolitan Areas. (S) *Fall* (3) Mr. Miri. *Prerequisite:* Government 353, or *Consent of Instructor*.

An examination of the American political system's capacity to confront and solve problems of the nation's urban areas. Historical, economic, and sociological factors affecting the political process in "metro areas" will be considered.

456. The Development of Public Policy. (S) *Fall or Spring* (3) Mr. Morrow.

A multi-dimensional examination of the salient factors which interact in the development of public policy in the United States. Emphasis is placed on how policy solutions to public problems are defined, represented, legitimized, administered and evaluated.

465. Public Opinion and Voting Behavior. (S) *Fall or Spring* (3) Mr. Edwards. *Prerequisite:* Government 371 or *consent of instructor*.

The relationship between opinions and political policymaking, including the characteristics of political opinions, patterns of voting behavior, and the importance of leadership.

491. Topics in Government. (S) *Fall or Spring* (3) Staff.

Selected topics in Government. The topic to be considered will be announced prior to the beginning of the semester.

494. Independent Study. (S) *Fall or Spring* (3) Staff.

A program of independent study, usually involving extensive reading and the writing of an essay, arranged by the student in consultation with the Department.

HONORS STUDY

495, 496. Senior Honors. (S) *Fall and Spring* (3,3) Staff.

Students admitted to Senior Honors in Government will be responsible for (a) reading and discussion of selected materials; (b) satisfactory completion by May 1 of

GOVERNMENT

an original scholarly essay; (c) satisfactory performance in a comprehensive examination in the field of the student's major interest.

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in government, write to the department chairman for a Graduate Catalog.

History

RICHARD LEE MORTON, CHANCELLOR PROFESSOR OF HISTORY, EMERITUS. PROFESSORS L. JOHNSON (*Chairman of the Department*), BEYER, BROWN, BOURDE,¹ COYNER, ESLER, FEHRENBACHER (*HARRISON CHAIR, 1973-74*), FOWLER, FREEMAN, MCCULLY, MCGIFFERT,² SELBY, SHERMAN, and TATE. ASSOCIATE PROFESSORS CRAPOL, FUNIGIELLO, MCARTHUR, MCCORD, SHEPPARD,³ and STRONG. ASSISTANT PROFESSORS CANNING, EWELL, GREENBERGER,⁴ KELLY,⁵ MIDDLETON,⁵ MCCUSKER,⁵ THOMPSON, and WALKER. LECTURERS CARSON,⁶ CULLEN,⁷ FIERING, H. JOHNSON,⁷ and RILEY.⁶

Most of the courses listed below divide broadly into European and American history, with a basic chronological coverage from a logical beginning of each to modern times. While the time periods follow each other in order, the courses really consist of topical studies of the period in question, with each professor emphasizing the features of his subject that are significant to the period and which help explain it in ways important to him. A student taking several courses in chronological sequence and from different professors will find a diversity in approach and a variety in interpretation leading to a broad experience with the past. The student will notice that the divisions of European and American history include more than North American and Western European courses. Latin American has an important place in the department's offerings, and by cross-listing with the Classics Department and the Physics Department, so do the Classical World and the History of Science. The history of Asia has a separate place in the Department's curriculum.

From the two introductory courses, History 101, 102 and 201, 202, department offerings progress through an intermediate level, where an essentially survey approach is used, though with reliance upon sources more sophisticated than are used in the introductory courses, to the advanced level. Here the purpose is to develop the student's ability to reflect about historical evidence and to reach valid conclusions about it within the framework of a given subject. This development of the student's critical powers will promote a better understanding of the historical process and of the significance that the past holds for the present.

The undergraduate program of the Department is complete for most of its students within the courses mentioned. Some students, however, with special interests and talents, will want to work on a special topic in close association with a member of the Department. For these students the Department Honors program will be the culmination of their work in the senior year.

REQUIREMENTS FOR CONCENTRATION

Concentration in History requires 30 semester credits in history, including History 101, 102, 201 and 202, except that one or more semesters of the preceding courses may be waived by the department chairman upon demonstrated proficiency in European or American history. Students are advised not to limit their junior and senior year courses to those dealing with the history of any one nation. Foreign languages are recommended for students planning to concentrate in history.

¹ Harrison Chair, 1972-73

² Visiting Professor, 1972-73, 1973-74

³ On leave 1972-73

⁴ Visiting Assistant Professor, 1972-73

⁵ Fellow, Institute of Early American History and Culture

⁶ Research Department, Colonial Williamsburg Foundation

⁷ John Marshall Papers

HISTORY

DESCRIPTION OF COURSES

European History

101, 102. History of Europe. (AS) *Fall and Spring* (3,3) Staff.

A general introduction to the history of European civilization from classical times to the present. The first semester goes to 1715; the second, from 1715 to the present day.

150. Freshman Seminar. *Fall and Spring* (3,3) Staff.

Topics to be announced.

301, 302. The Ancient World. *Fall and Spring* (3,3) Mr. Jones.¹

Ancient Civilization from prehistoric times to the downfall of the Roman Empire. The first semester deals with the ancient Orient and Greece up to 323 B.C.; the second semester covers Pre-Roman Italy, the Roman Republic and the Roman Empire. (Same as Classical Civilization 311, 312. The course cannot be counted for concentration in history.)

311, 312. Europe in the Middle Ages. (AS) *Fall and Spring* (3,3) Mr. Freeman.

The origins and nature of Medieval civilization. First semester: the newly forming West and the Roman, German, Byzantine, and Arab influences which worked to create it. Second semester: the aggressive expansion of government, the church, business, and city life along with the counter-development of restrictive forces that limited their free expansion. (Not offered 1973-74.)

315, 316. The Age of Absolutism and Revolution in Europe, 1448-1871. (AS) *Fall and Spring* (3,3) Mr. Sheppard.

An intensive survey of Europe in transition: Absolutism, Enlightenment, Democratic Revolution and the emergence of the modern state.

317, 318. Recent Europe, 1871 to the Present. (AS) *Fall and Spring* (3,3) Mr. Strong. *Prerequisite: History 101, 102.*

First semester: the background to World War I, the course of the war, the Versailles settlement. The second semester: 1918 to the present, with emphasis on the failure of the Versailles settlement, World War II, and the emergence of contemporary Europe. (Not offered 1973-74.)

319, 320. History of England. (AS) *Fall and Spring* (3,3) Mr. McCord.

The political social, religious and economic history of England. First semester: Roman occupation through the reign of Elizabeth I; Second semester: 1603 to the present. (not offered 1973-74).

321, 322. The History of Russia. (AS) *Fall and Spring* (3,3) Mr. McArthur.

The political, economic, social and intellectual development of Russia. First semester to 1855. Second semester 1855 to the present.

323, 324. Intellectual History of Modern Europe. (AS) *Fall and Spring* (3,3) Mr. Esler.

Cultural and intellectual development of the western world from the end of the middle ages to the present. First semester: from the renaissance to the enlightenment. Second semester: the nineteenth and twentieth centuries.

¹ Chancellor Professor of Classical Studies.

HISTORY

409, 410. England Under the Tudors and Stuarts. (S) *Fall and Spring* (3,3) Mr. Fowler. *Prerequisites:* History 101, 102.

The first semester, 1485–1603; the second semester, 1603–1714.

411. Constitutional History of Medieval England. (S) *Fall* (3) Mr. Freeman.

A study of English constitutional development from the Norman Conquest to the beginning of the Tudor monarchy. Special emphasis will be placed on the royal courts and the common law, restrictions on the king, the effects of war on the constitution, and the place of parliament.

413, 414. The Making of Modern England. (S) *Fall and Spring* (3,3) Mr. McCord.

An examination of the political, economic, social, and intellectual changes which explain England's transition from an aristocratic to a democratic society. The course divides in the mid-Victorian period.

417, 418. The British Empire. (S) *Fall and Spring* (3,3) Mr. McCully.

First semester: the formation and development of the old Colonial Empire through the American Revolution. Second semester: the rise of the new Empire through the nineteenth and twentieth centuries to the establishment of the British Commonwealth of Nations.

433, 434. Modern Germany. (S) *Fall and Spring* (3,3) Mr. Strong.

First semester: origins and establishment of the Second Reich. Second semester: establishment of the Third Reich.

437, 438. History of France, 1715 to the Present. (S) *Fall and Spring* (3,3) Mr. Shepard.

First semester, 1715–1815. Intensive examination of a pre-industrial society with special emphasis on social, economic and intellectual problems during the ancient regime, Revolution and Napoleon. Second semester, 1815–present. Special attention to social and economic problems as well as to the politics of twentieth-century France. (Not offered 1973–74.)

471. The Russian Intelligentsia: Selected Problems. (S) *Fall* (3) Mr. McArthur. *Prerequisite:* History of Russia, or consent of instructor.

Selected aspects of the nature and role of the Russian intelligentsia. Considerable use will be made of primary materials, including literature. A knowledge of the Russian language is not required, but will be utilized when available. (Not offered 1973–74.)

472. The Russian Revolution. (S) *Spring* (3) Mr. McArthur. *Prerequisite:* History of Russia, or consent of instructor.

The origins, course, and impact of the Bolshevik Revolution. Considerable use will be made of primary materials. A knowledge of the Russian language is not required, but will be utilized when available. (Not offered 1973–74.)

474. Medieval England. (S) *Spring* (3) Mr. Freeman.

Special emphasis will be placed on the period from the Norman Conquest through the fourteenth century, when the English were aggressive abroad and creative at home. The social, economic, political, and military explanations for this expansive period will be examined. (Not offered 1973–74.)

481. History of Physical Science: its origins, Sixth Century B.C. through the Renaissance. *Fall* (3) Mr. McKnight.

A study of the Greek and Hellenistic endeavors to explain observed physical phenomena, of Arab science in the Middle Ages, of the revival of academic science dur-

HISTORY

ing the rise of the European Universities, and Renaissance beginnings of modern physics and astronomy. (Same as Physics 417).

482. History of Physical Science: The Classical Period, 1687–1900. Spring (3) Mr. McKnight.

A study of the development of the physical sciences after the publication of Newton's Principia. Emphasis will be placed on influences acting on and within the scientific community, on the impact of science on the institutions of society, and on the interrelations between the development of science and that of mathematics and philosophy. (Same as Physics 418).

AMERICAN HISTORY

201, 202. American History. (AS) *Fall and Spring* (3,3) Staff.

The development of the United States. Special emphasis is placed on the period since 1776. The course divides at the year 1877.

***201H, 202H. American History. (Honors course.)** (AS) *Fall and Spring* (3,3) Miss Walker.

Designed to give the student insight into problems of interpretation and methodology, and to acquaint him with the literature of American history.

309, 310. Survey of Latin American History. (AS) *Fall and Spring* (3,3) Miss Ewell.

The development of Latin America from Pre-Columbian times to the present. Emphasis is on the inter-action of European, Indian, and African elements in colonial society, the growth of national consciousness, and the related phenomena of political instability and economic underdevelopment.

401, 402. Topics in Modern History. *Fall and Spring* (3,3) Staff.

A tutorial and seminar at the junior-senior level designed for outstanding history concentrators. Recommended for students intending to pursue graduate study.

***403. Colonial and Revolutionary Virginia.** (S) *Spring* (3) Mr. Tate.

A specialized study of the founding and development of the Virginia colony with special emphasis on the evolution of its social and political structure. (Not offered 1973–74.)

405, 406. Early American History. (S) *Fall and Spring* (3,3) Mr. Selby.

Special stress is laid on the nature of the new society in British North America and the development of ideas and institutions which, in the course of the struggle for independence and the formation of the union of states, emerged as a distinctive national culture. The course divides at the year 1763 and concludes with the end of the War of 1812.

421, 422. The United States, 1815–1877. (S) *Fall and Spring* (3,3) Mr. L. Johnson.

The origins, development, and outcome of the struggle between the North and South.

423, 424. The United States 1877 to 1945. (S) *Fall and Spring* (3,3) Mr. Sherman.

The emergence of modern America. Primary emphasis is on domestic developments. Major topics include: the rise of industry, political trends, economic and social reform movements, and the role of ethnic and racial minorities. The course divides around 1920. (424 not offered 1973–74.)

HISTORY

425. The United States Since 1945. (S) *Fall* (3) Mr. Sherman.

The primary emphasis in this course is on domestic developments since World War II, including political and economic trends, the civil rights movement, and other recent social reform activities.

429, 430. American Constitutional History. (S) *Fall and Spring* (3,3) Mr. Cullen, Mr. H. Johnson.

First semester: evolution of the federal constitution from national supremacy and dual sovereignty, with special emphasis upon the constitutional significance of the post-Civil War amendments. Second semester: federal constitutional development in the fields of business regulation, federal-state relations, civil liberties and civil rights. The course divides in 1877. (Not offered 1973-74.)

441. The Caribbean. (S) *Fall* (3) Mr. Beyer.

Deals particularly with the Spanish, English, and French West Indies. A sequential treatment of the eras of exploration and colonization; plantation prosperity and international rivalry; post emancipation problems; and incipient nationalism.

442. Brazil. (S) *Spring* (3) Mr. Beyer.

Antecedents of modern Brazil, 1500-present, with accent on economic, social, and cultural factors as well as on political growth in the Portuguese colony, the Empire, and the Republic.

443, 444. History of American Foreign Policy. (S) *Fall and Spring* (3,3) Mr. Crapol.

The formulation and development of American foreign policy from 1775 to the present. The emphasis is on the domestic and international forces which have shaped American foreign policy. Special attention is given to the problems involved in the planning and execution of foreign policy. First semester: 1775 to 1899. Second semester: 1899 to 1945. (443 not offered 1973-74.)

445. History of American Foreign Policy in the Cold War Era. (S) *Fall or Spring* (3) Mr. Crapol.

An intensive analysis of the origins of the cold war, the policy of containment, global conflict since 1945, the strategy of foreign aid, and the ideological contest in the underdeveloped world. (Not offered 1973-74.)

453, 454. American Intellectual History. (S) *Fall and Spring* (3,3) Mr. Fiering, Mr. Thompson.

A study of the relation between ideas and events from Colonial times through the present. Included are investigations of philosophical, religious, political, and economic ideas as they relate to the Reformation, the Enlightenment, Transcendentalism, slavery, Darwinism, Pragmatism, and other categories. A familiarity with philosophy is strongly recommended. (Formerly 425, 426.)

459. Problems in Modern History. (S) *Fall* (3) Mr. Fehrenbacher, James Pinckney Harrison Professor of History, 1973-74.

Topic: The Presidency from Washington to Lincoln.

461, 462. American Social History. (S) *Fall and Spring* (3,3) Mr. Brown.

The origins of American society in Europe and Africa, and the transition from deferential, rural, agrarian America to democratic, urban, industrial America.

463. The Old South. (S) *Fall* (3) Mr. Coyner.

The American South from its colonial origins to secession, including, as major topics, the structure of society, the economy, slavery, the growth of Southern sectionalism, and the Southern mind.

HISTORY

464. The Emergence of the New South since 1865. (S) *Spring* (3) Miss Walker.

A survey of the political, economic, and social developments in the South since the Civil War. The course will examine Reconstruction, the Bourbon regimes, Populism, racism, progressivism, the depression, the New Deal, and post World War II conditions. (Not offered 1973-74.)

466. The Negro in the United States Since 1861. (S) *Spring* (3) Miss Walker.

An examination of the role of the black man in American society from the Civil War to the present. The course will consider political, economic, and social developments within the black community, as well as problems of black-white relations.

476. The Rise of Urban America. (S) *Fall* (3) Mr. Funigiello.

The American city from the colonial period to the present; political and economic institutions, social change, technological innovations, planning theories, and the reactions of sensitive observers to the process of urbanization as expressed in imaginative literature and scholarly studies.

477. History of Mexico. (S) *Spring* (3) Miss Ewell.

Development of the Mexican nation from the Spanish conquest to the present. Sequential treatment of the interaction of Spanish and Indian cultures, expansion of the frontier, independence, 19th century liberalism and caudillism, the Mexican Revolution of 1910 and its institutionalization.

479. Social and Intellectual History of Latin America. (S) *Fall* (3) Miss Ewell.

Survey of Latin American society and thought from the sixteenth to the twentieth century. The study of English translations of primary sources (novels, histories, essays, poetry, journals) will illustrate the relationship between society and the intellectual in Latin American history.

ASIAN HISTORY

205, 206. Survey of East Asian Civilization. (AS) *Fall and Spring* (3,3) Mr. Canning.

A general political and cultural history of China, Korea and Japan from ancient times to the present.

483, 484. Modern History of China and Japan. (S) *Fall and Spring* (3,3) Mr. Canning.

In addition to the political history of China and Japan, this course will examine social structure, the economy and government to determine why the response to the challenge of the West was so different in each society.

HONORS STUDY

†495, 496. Honors. *Fall and Spring* (3,3) Staff.

Students admitted to Honors Study in History will be enrolled in this course during both semesters of their senior year. Each candidate will be responsible for (a) reading and discussion of a selected list of books in some specific area of historical literature; (b) a scholarly essay by May 1; (c) a comprehensive oral examination.

THE JAMES PINCKNEY HARRISON CHAIR OF HISTORY

The generosity of Mrs. James Pinckney Harrison and her son, Mr. James Pinckney Harrison, Jr., has enabled the College to establish an endowed chair in History in honor of James Pinckney Harrison, Sr. The purposes of this endowment are explained by the donors as follows:

The James Pinckney Harrison Chair of History is established to encourage the study

HISTORY

of history as a guide for the future, as a field of absorbing interest and pleasure, and as a source of the wisdom, charm and gentility exemplified by James Pinckney Harrison. Born in Danville in 1896, he spent much of his life until his death in 1968 in Charles City County, not far from "Berkeley," his ancestral home. Far-ranging travels for business and country led him to an appreciation of many cultures of the world, but also strengthened his love and commitment to Virginia. As Chairman of the Board of Universal Leaf Tobacco Company of Richmond for many years, James Pinckney Harrison served in many civic, philanthropic and business affairs, ever enriching the life of those around him.

GRADUATE PROGRAM

The department offers the degrees of Master of Arts and Doctor of Philosophy. For degree requirements, and a full description of graduate courses in history, write to the department chairman for a Graduate Catalog.

The History Department in cooperation with the Institute of Early American History and Culture, the Earl Gregg Swem Library, and Colonial Williamsburg offers fourteen-month programs combining nine months of academic study leading to the degree of Master of Arts with practical experience in the editing of historical books and magazines and in the operations of a historical library. The programs commence on July 1 of each year and continue until August 31 of the succeeding year with breaks of approximately two weeks each before and after the intervening academic session in addition to the usual college holidays.

Interdisciplinary Study

The curriculum of the Faculty of Arts and Sciences provides for interdisciplinary concentrations. A student formulates an interdisciplinary concentration in consultation with a faculty advisor, subject to approval by the Committee on Interdisciplinary Study. Programs are submitted to the Committee on application forms which are available from the Assistant Dean of Students.

All interdisciplinary programs must be compatible with the degree requirements of the Faculty of Arts and Sciences. No concentration may exceed 42 hours or be less than 27 hours. The responsibility for formulating a sound academic program of interdisciplinary study lies with the individual student and the advisor.

495-496. Interdisciplinary Honors (3,3)

Students admitted to Interdisciplinary Honors will be enrolled in this course during both semesters of their senior year. Each candidate will be responsible for (a) formulating a program of study in consultation with a faculty advisor; (b) preparation and presentation by May 1 of an honors essay; (c) satisfactory performance in a comprehensive oral examination which focuses on the subject matter of the honors essay.

Law

301. Introduction to Law. Fall or Spring (2) Mr. Zepkin.

The nature and function of our system of jurisprudence, including a survey of procedural concepts, trial strategies, substantive law such as torts, crimes, contracts, agency, partnerships, corporations, real estate, gifts and inheritance. Illustrated with practical examples from both the attorney's and the client's standpoint.

Mathematics

ASSOCIATE PROFESSOR O'NEIL (*Chairman of the Department*), PROFESSORS CATO, REYNOLDS¹ and SOUTHWORTH. ASSOCIATE PROFESSORS BYNUM, LAWRENCE, PROSL, RUBLEIN, SANWAL, STANFORD and TURNER. ASSISTANT PROFESSORS BANGS,² CONNER, DREW, EASLER, GIBBS, KATZKE, JORDAN², MILLER, POOLE, RABINOWITZ, and STOCKMEYER. SENIOR RESEARCH ASSOCIATE ANDERSEN. ADJUNCT PROFESSOR ORTEGA.

AREA AND SEQUENCE REQUIREMENTS

The basic college requirement concerning Area 3 may be satisfied in Mathematics by taking any two of the courses.

Mathematics 105, 106, 111, 112

The in-depth or sequence requirement may be satisfied by taking any two other Mathematics courses numbered 211 or above. A student who has successfully completed Math 211 or any higher numbered course will not be allowed to enroll in Math 105 or Math 106.

CONCENTRATION PROGRAM

The department's program includes two major tracks: (1) Concentration in mathematics and (2) concentration in mathematics with a computer science option.

MATHEMATICS

A wide choice of courses is offered which enables a student to be trained in several areas including preparation for graduate school in mathematics, teacher certification and industry. The basic concentration requirements for all of these areas are as follows:

1. Math 111, 112, 211, 212, 311, 312, 407
2. Six semester hours chosen from 403, 404, 405, 406 and 408
3. Six more hours taken from courses numbered above 300.

COMPUTER SCIENCE OPTION

Computer Science is the study of computers and the phenomena surrounding them. The discipline is intimately involved with the representation, manipulation and presentation of information. It is also concerned with the organization, application and the theoretical characterization of the properties and limitations of computers. This concentration was developed in order to give students the training necessary to enter graduate school in computer science and to obtain employment as computer professionals. Concentration requirements for this option are as follows:

1. Math 111, 112, 211, 212, 342, 401, 407, 413
2. C.S. 141, 241, 242
3. Three more hours chosen from Math 414, 431, 432, C.S. 441, 442.

DESCRIPTION OF COURSES

103. Algebra-Trigonometry. *Fall and Spring* (3,3) Staff.

A study of the real number system, sets, functions, graphs, equations and inequalities, systems of equations, matrices and determinants, followed by a study of the trigonometric functions and their properties. Recommended only for science majors who have a deficiency in their training. This course may not be applied either to-

¹ Chairman of the Department, 1972-73

² 1972-73

MATHEMATICS

wards concentration in mathematics or towards satisfaction of college area requirements.

105, 106. Fundamental Concepts of Mathematics. (A) *Fall and Spring* (3,3) Staff.

These courses are designed to provide the non-science student with an insight into the nature and scope of modern mathematics.

105. A study of set theory and cardinality, number theory and abstract algebra and topics from topology and matrix theory.

106. A study of computer programming, probability and topics from analysis, game theory and linear programming.

111-112. Calculus. (A) *Fall, Spring* (3,3) Staff.

Inequalities, absolute value; the concept of a function, limits and derivatives of functions, the Mean Value Theorem; applications to maxima and minima, related rates, and linear motion; the definite integral and the Fundamental Theorem of Integral Calculus; techniques of integration; improper integrals; applications to areas, volumes, work and moments.

211. Linear Algebra. (AS) *Fall, Spring* (3) Staff. *Prerequisite: Math 112.*

An introduction to vector spaces, linear transformations, matrices and determinants; applications to systems of ordinary differential equations.

212. Introduction to Multivariable Calculus. (AS) *Fall, Spring* (3) Staff. *Prerequisite: Math 211 or consent of the chairman of the department.*

Functions of several variables, surfaces in three-space, vectors, techniques of partial differentiation and multiple integration with applications.

302. Ordinary Differential Equations. (AS) *Spring* (3) Staff. *Prerequisite: Math 212 or the consent of the head of the department.*

First order differential equations, initial value problems, second order linear differential equations, systems of linear differential equations and Laplace transforms.

***308. Geometry.** (AS) *Spring* (3) Mr. Reynolds. *Prerequisite: Consent of the Instructor.*

Axioms and deductive reasoning; some advanced Euclidean geometry including cross ratio and axiomatic systems; synthetic and coordinate projective geometry; duality; perspectivity; conics. Recommended for prospective teachers.

311-312. Advanced Calculus. (AS) *Fall and Spring* (3,3) Messrs. Prosl and Stanford. *Prerequisite: Math 212.*

Functions of several variables, directional derivative, operations with Taylor's series, uniform convergence, Green's and Stokes' Theorems and other topics chosen from classical analysis.

342. Discrete Structures. (AS) *Spring* (3) Staff. *Prerequisite: C.S. 141, Math 211.*

Fundamental algebraic, logical, and combinatoric concepts from mathematics which are needed for advanced work in computer science.

344. Combinatorial Analysis. (AS) *Spring* (3) Staff. *Prerequisite: Math 211.*

Elementary counting functions, partitions, inversion formulas, Polya's theorem, finite geometries, and Latin squares.

†401-402. Probability and Statistics. (AS) *Fall and Spring* (3,3) Mr. Rabinowitz. *Prerequisite: Math 212.*

MATHEMATICS

First semester topics include: combinatorial analysis, Bayes's Theorem, discrete and continuous probability distributions and characteristics of distributions. The second semester deals with statistical inference theory and applications including sampling from probability distributions, estimation, hypothesis testing, confidence methods, regression analysis, sequential analysis, and non-parametric statistics.

†403-404. Intermediate Analysis. (AS) *Fall and Spring* (3,3) Mr. Bynum. *Prerequisite:* 312.

Set theory; the real number system; analysis in metric spaces including continuity and convergence; normed linear spaces; integration and differentiation theory.

†405-406. Complex Analysis. (AS) *Fall and Spring* (3,3) Mr. Lawrence. *Prerequisite:* Math 312.

The complex plane, analytic functions, Cauchy Integral Theorem and the calculus of residues, Taylor and Laurent series; analytic continuation; conformal mapping and boundary value problems.

†407-408. Abstract Algebra. (AS) *Fall and Spring* (3,3) Messrs. Miller and Stockmeyer. *Prerequisites:* Math 212.

Groups, rings, isomorphism theorems, polynomials, modules, vector spaces; linear transformations, matrices, Jordan and other canonical forms, quadratic forms.

†410. Special Topics. (AS) *Fall or Spring* (1, 2 or 3 depending upon material covered.) Staff.

Topics selected from Theory of Equations, Projective Geometry, Linear Algebra, Intermediate Analysis, Applied Mathematics, etc.

†412. Introduction to Number Theory. (AS) *Fall* (3) Mr. Reynolds. *Prerequisite:* Consent of the Instructor.

An elementary course in the theory of integers, divisibility and prime numbers; a study of Diophantine equations, congruences, number theoretical functions, decimal expansion of rational numbers and quadratic residues. Recommended for prospective secondary teachers of mathematics.

†413-414. Topics in Numerical Analysis. (AS) *Fall and Spring* (3,3) Mr. Southworth. *Prerequisites:* Math 212 and computer programming.

The topics to be discussed the first semester are roots of equations, solutions of systems of linear equations by matrix methods, eigenvalues and eigenvectors of matrices, interpolation, numerical evaluation of integrals, and numerical differentiation.

The second semester topics include empirical data curve fitting, integration of systems of ordinary differential equations of both the initial value and boundary value type.

431. Mathematical Theory of Finite Automata. (AS) *Fall* (3) Staff. *Prerequisite:* A course in abstract algebra.

An introduction to APL, logical functions and Boolean algebra; the theory of sequential machines and neural nets; the concepts of state- and machine-equivalence; deterministic and non-deterministic finite automata and regular expressions; semi-groups and abstract machines.

432. Introduction to the Theory of Computability. (AS) *Spring* (3) Staff. *Prerequisite:* Math 431.

The notions of effective procedure, algorithm and Turing machine; modifications of Turing machines; Church's Thesis and computability; recursive functions and LISP; other models for general computability and their equivalence; Post's symbol manipulation systems and the normal form theorem.

MATHEMATICS

451. Survey Sampling. *Fall* (3) Mr. Rabinowitz. *Prerequisite:* An introductory course in Statistics or consent of the instructor.

An introduction to the design and analysis of sample surveys intended for students of business and the social sciences. Topics include simple random sampling, stratified sampling, cluster sampling, systematic sampling and ratio estimation. Practical aspects of survey problems are emphasized using applications to auditing and accounting problems, political and economic polls, sociological studies, psychological experiments and wildlife management. The course is not open to math concentrators.

***495-496. Honors.** *Fall and Spring* (3,3) Staff.

Students admitted to Honors Study in Mathematics will be enrolled in this course during both semesters of their senior year. The course comprises:

- (a) supervised research in the student's special area of interest;
- (b) the preparation and presentation by May 1 of an Honors Thesis; and
- (c) satisfactory performance in a comprehensive oral examination in the field of the student's major interest.

COMPUTER SCIENCE

Credit will not be allowed for both C.S. 130 and C.S. 141.

C.S. 130. Fundamental Concepts of Computing. *Fall and Spring* (3,3) Mr. Katzke.

Introduction to computing concepts, computer programming, and various applications.

C.S. 141. Introduction to Computer Science. *Fall and Spring* (3,3) Staff.

The solution of computational problems by use of digital computers. Subjects covered are the development of mathematical models, the concept of algorithms, the use of flow charts in describing computational processes, and the concept and use of programming languages, including FORTRAN and an algorithmic language such as ALGOL.

C.S. 241. Advanced Programming. *Fall and Spring* (3,3) Staff. *Prerequisite:* C.S. 141.

An introduction to advanced features of modern programming languages with the purpose of abstracting the underlying concepts from these languages. Topics include machine language programming, assembler language programming, and organization of digital computer. Students will be required to write several programs.

C.S. 242. Computer Software. *Fall and Spring* (3,3) Mr. Poole. *Prerequisite:* C.S. 241.

The organization of computer software and related problems. Topics include microprogramming, Input-Output facilities, and operating systems. Students will complete several programming assignments which will include the design and implementation of a simulator, an assembler, an elementary loader, and a simple batch processing monitor for a hypothetical digital computer.

C.S. 441. Compiler Construction. *Fall* (3) Mr. Gibbs. *Prerequisite:* C.S. 242, Math 342.

The analysis of source language and the generation of efficient object code with emphasis on syntax directed methods. Students will be required to complete a term project.

C.S. 442. Higher Level Languages. *Spring* (3) Mr. Gibbs. *Prerequisite:* C.S. 241, Math 342.

A survey of string manipulations and list processing languages. The relationship be-

MATHEMATICS

tween source programs and their run-time representation will be considered. Students will be required to write programs in several different languages.

GRADUATE PROGRAM

The department offers the degrees of Master of Arts and Master of Science. For degree requirements, and a full description of graduate courses in mathematics, write to the department chairman for a Graduate Catalogue. Attention is also called to the Graduate Program in Applied Science on p. 168.



Military Science (Army)

PROFESSOR COLONEL HOCKADAY (*Chairman of the Department*) ASSISTANT PROFESSORS LTC FOGLER, MAJOR EMANUEL, MAJOR SMITH, and MAJOR SCHMIDT.

A unit of the Reserve Officers' Training Corps was established at the College of William and Mary on July 1, 1947, with an assigned mission to qualify students for positions of leadership and management in the Armed Forces in time of national emergency.

The courses are designed specifically to educate students in General Military Science. The GMS course gives the student a college level program of general military subjects, teaches him the fundamentals of leadership, and provides him an opportunity to perfect his leadership and management techniques by practical application.

Any male student who is a citizen of the United States, physically qualified, and not already holding a commission in any of the Armed Forces may, when he matriculates, enroll in Military Science 101.¹ Those meeting the above qualifications but who have had prior military experience, whether in the Armed Forces or in another college, may, commensurate with the degree of such experience, enroll in Military Science at a higher level. Transfer students desiring to take advantage of previous military courses should consult the Professor of Military Science when they matriculate.

Those who complete this program may, upon graduation from the College, be commissioned as Second Lieutenants, United States Army Reserve. Outstanding ROTC cadets will be offered a commission in the Regular Army under the provisions of the Distinguished Military Graduate Program.

Freshmen and sophomore students are furnished standard government issue uniforms. Those who enroll in the advanced course receive tailored officer-type uniforms. Students enrolled in the advanced course become members of the Enlisted Reserve and receive an allowance of \$100.00 per month. Advanced course students are required to attend summer camp for a period of six weeks, normally between their third and fourth years at college, and are paid one half of a second lieutenant's salary during that period. They also receive travel pay to and from camp, and while there, are rationed and quartered at government expense.

The Professor of Military Science may grant a draft deferment to any student enrolled in ROTC. Current regulations also permit a delay in the active duty training of newly commissioned students who have been accepted for graduate work in a recognized field and who have applied for such delay. Another option, subject to the needs of the service, permits the newly commissioned officer to serve 12 weeks on active duty and fulfill his remaining obligation in a reserve status.

Army ROTC Scholarship Program. This program offers free tuition, textbooks and fees in addition to paying an allowance of \$100.00 per month. Scholarships are provided under provisions of Public Law 88-647, The ROTC Vitalization Act of 1964. Four year scholarships are awarded to outstanding high school seniors and interested students are encouraged to write the Army Headquarters in their area if high school counselors do not have information on the program. One, two and three year scholarships may be applied for through the Professor of Military Science.

DESCRIPTION OF COURSES

101-102. Military Science I. Fall and Spring (0,0) Major Emanuel.

Introduction and orientation to military terminology, concepts, leadership and management principles.

¹ For those students desiring to participate, there is a 2 year program available beginning with the summer prior to the junior year and extending through completion of the senior year. Details available at the office of the Department of Military Science.

MILITARY SCIENCE (ARMY)

****200. American Military Development.** *Spring* (3) Major Schmidt.

An analysis of American Military History. The course begins with the Seven-Years War and traces American military history to the present. Emphasis is given to the principles of war and to the development of tactics.¹

201-202. Military Science II. *Fall and Spring* (0,0) Major Schmidt. *Prerequisites:* MS 101-102.

A study of map and aerial photograph interpretation with primary attention given to the principles of military terrain evaluation and land navigation; the basic concepts of military operations and tactics.

****300. American Civil-Military Relations.** *Fall* (3) LTC Fogler.

Theory of civil-military relations and their impact on the contemporary world scene. Emphasis is placed on the extent to which these relations tend to affect the military security of society. Case studies of historical and contemporary military leadership and management are examined.¹

301-302. Military Science III. *Fall and Spring* (0,0) LTC Fogler.

A study of management and control of small unit operations under field conditions with special emphasis given to offensive/defensive tactics, communications, and internal defense and development. Fundamentals of military instruction are taught with emphasis on practical application. Physical fitness and review of previous subjects are stressed in preparation for summer camp.

401-402. Military Science IV. *Fall and Spring* (0,0) Major Smith.

Analysis of selected leadership and management problems involved in administration, military justice, and tactics; leadership and management problems in the military services.

¹ MS 200 and MS 300 courses are open to all students at the College for credit with the permission of the Professor of Military Science.

Modern Languages ¹

ASSISTANT PROFESSOR DIDUK (*Chairman of the Department*) PROFESSORS BANNER,² HOFFMAN, KALLOS, MOORE, OUSTINOFF, STONE. ASSOCIATE PROFESSORS COKE, COX, KURTZ, LAVIN, MARTEL, ZIMMERMAN. ASSISTANT PROFESSORS BACKHAUS, CLOUTIER, GOFF, HALLETT, KELLEY, KILLEN,³ NETICK, PALMAZ, SAINT-ONGE, G. SMITH, J. SMITH, TYLER. INSTRUCTORS BASSO, COOKE, HUNSUCKER, WELCH.

Courses in the 100 ⁴ and 200 groups are designed to give a well-rounded linguistic experience, including the spoken as well as the written language, and to develop an awareness and appreciation of other cultures. Language laboratory is an integral part of courses 101 and 102; three class meetings and two hours in the language laboratory.

Courses in the 300 and 400 groups are designed to give further experience in the principal facets of language study, a reasonable knowledge of the literature, some experience in literary criticism, to the end that the student may experience in some degree the humanizing process which derives from the study and understanding of foreign languages and cultures. Courses in general are conducted in the foreign language.

For those who show a special interest in French, German or Spanish, the College has established language houses where such students may request residence with others who elect to use a foreign idiom as a means of communication. Foreign students in residence provide an opportunity for unstructured language learning as well as a source of information on current living in the target language countries.

The suitability of the Department's offerings to an Interdisciplinary concentration is further enhanced by the literature courses in translation, which extend the vast areas of French, German, Spanish and Russian literature otherwise not readily available to students who do not major in language study.

The Department is also actively engaged in courses of Comparative Literature and in interdisciplinary programs. In relating their language skills to the exploration of topics which transcend national boundaries, the students obtain a broad view of the European community.

Students concentrating within the area of Modern Languages are required to take at least two semester courses in a second foreign language, either ancient or modern.

Modern Languages 203. (A) A Linguistic Survey of Major East-Asian Languages. Spring (3) Mr. Stone.

For students interested in learning about the mechanism and characteristics of languages very different from those of the West and about their systems of writing. The aim is not to learn Chinese, Japanese and Korean, but to learn about them. Short examples and tapes for illustration.

FRENCH

Requirements for Concentration

The following courses are required for concentration in French: French 321, 332, 404, 405; also, either 341 or 342 and either 351 or 352; a minimum of nine additional hours will be chosen from among the 300 and 400 courses.

DESCRIPTION OF COURSES

101-102. Elementary French. *Fall and Spring (4,4) Staff.*

¹ The proficiency requirements for foreign languages are indicated on page 00. All language requirements for a degree should be begun in the freshman year.

² Chairman of the Department, 1972-73

³ 1972-73

⁴ No credit will be counted toward a degree for the first semester of an elementary foreign language unless followed by the successful completion of the second semester of that language.

MODERN LANGUAGES

Students who have acquired 2 high school units in French may not take French 101-102 for credit. Training in grammar, pronunciation, aural-oral comprehension with the use of audio-visual techniques. *Three Class Hours, Two Laboratory Hours.*

201. Readings in French and Grammar Review. *Fall* (3) Staff. *Prerequisite: two high school units, or the equivalent.* Students who have acquired three high school units in French may not take 201 for credit.

A review and continuation of the study of French grammar, incorporated with the continued development of reading, writing, speaking, and comprehension skills.

202. Intermediate Readings in French Literature. *Fall and Spring* (3) Staff. *Prerequisite: three high school units, or French 201, or the equivalent.*

Selected readings from French literature of the nineteenth and twentieth centuries.

205. Intermediate Composition and Conversation. *Fall and Spring* (3) Staff. *Prerequisite: French 202 or the equivalent.*

Review of main principles of syntax. Composition.

206. Intermediate Conversation. *Fall and Spring* (3) Staff. *Prerequisite: French 205 or the equivalent.*

Phonetics; intensive oral-aural training. Discussions of topics in French life and culture; student presentations.

207. Advanced Readings in French Literature. (AS) *Fall* (3) Staff. *Prerequisite: four high school units or 202 or the equivalent.*

Selected readings from the Renaissance to modern times. A reading course designed as an introductory step to the 300 courses in literature.

208. The French Heritage. (AS) *Spring* (3) Staff. *Prerequisite: four high school units or 202 or the equivalent.*

A course embodying the most important elements of French culture from early times to the present.

297. Contemporary French Drama and its Influence. (AS) *Fall* (3) Mr. Coke. Not open to concentrators in French. Same as Comparative Literature 307.

A study of trends in the modern French theater through selected readings of significant contemporary writers. The course includes discussion and reading of other major European or American writers connected with the French movement.

298. Contemporary French Novel and its Influence. (AS) *Spring* (3) Mr. St. Onge. Not open to concentrators in French. Same as Comparative Literature 304.

A study of trends in the modern French novel through selected readings of significant contemporary writers. The course includes discussion and readings of other major European or American writers connected with the French movement.

***301. (Former 209). A Survey of French Literature from the Middle Ages through the 17th century.** (AS) *Fall* (3) Mr. Oustinoff and Mr. St. Onge. *Prerequisite: four high school units or 202 or the equivalent.*

A study of the historical development of the literary genres from the Middle Ages to the 18th century.

***302. (Former 210). A Survey of French Literature from the 18th century into the 20th century.** (AS) *Spring* (3) Mr. Oustinoff and Mr. St. Onge. *Prerequisite: French 301 or the equivalent.*

A study of the historical development of the literary genres from the 18th century to modern times.

MODERN LANGUAGES

311 (Former 422). Literature of the Middle Ages. (AS) *Spring* (3) Mr. Hallett. *Prerequisite: French 301 or 302 or the equivalent.*

A study of French literature up to 1500: representative works. (Most texts are read in Modern French translation.)

312 (Former 423). Renaissance Literature. (AS) *Fall* (3) Mr. Hallett. *Prerequisite: French 301 or 302 or the equivalent.*

A study of the major writers of the French Renaissance.

321 (Former 301). Seventeenth-Century French Literature I. (AS) *Fall* (3) Mr. Cloutier and Mr. Tyler. *Prerequisite: French 207 or 301 or 302 or the equivalent.* Required of all concentrators.

Dramatic literature of the seventeenth century, emphasizing the major works of Corneille, Molière, and Racine.

322 (Former 302). Seventeenth-Century French Literature II. (AS) *Spring* (3) Mr. Coke. *Prerequisite: French 207 or 301 or 302 or the equivalent.*

Non-dramatic literature of the seventh century: the baroque poets, Malherbe, Pascal, La Fontaine, Boileau, and other major writers of the period.

331 (Former 311). Eighteenth-Century French Literature I. (AS) *Fall* (3) Mr. Martel. *Prerequisite: French 207 or 301 or 302 or the equivalent.*

The novel and the theatre of the eighteenth century.

332 (Former 312). Eighteenth-Century French Literature II. (AS) *Spring* (3) Mr. Coke. *Prerequisite: French 207 or 301 or 302 or the equivalent.* Required of all concentrators.

A study of the major writers of the French Enlightenment: Montesquieu, Voltaire, Diderot, Rousseau, and others.

341 (Former 401). Nineteenth-Century French Literature I. (AS) *Fall* (3) Mr. St. Onge. *Prerequisite: French 301 or 302 or the equivalent.* Concentrators must take either French 341 or 342.

A study of the major romantic writers in France.

342 (Former 402). Nineteenth-Century French Literature II. (AS) *Spring* (3) Mr. Martel. *Prerequisite: French 301 or 302 or the equivalent.* Concentrators must take either 341 or 342.

The novel of the nineteenth century with special emphasis on Balzac, Stendhal, Flaubert, and Zola.

350 (Former 404). Modern French Poetry. (AS) *Spring* (3) Mr. St. Onge. *Prerequisite: French 341 or at least nine hours of 300 literature courses or the equivalent.*

From the post-romantic poets to the present with special emphasis on Baudelaire, the Symbolists, and the Surrealists.

351 (Former 411). Twentieth-Century French Literature I. (AS) *Fall* (3) Mr. Oustinnoff. *Prerequisite: French 301 or 302 or the equivalent.* Concentrators must take either 351 or 352.

A study of representative writers and works up to 1939.

352 (Former 412). Twentieth-Century French Literature II. (AS) *Spring* (3) Mr. Cloutier. *Prerequisite: French 301 or 302 or the equivalent.* Concentrators must take either 351 or 352.

A study of representative writers and works since 1939; existential literature, the new novel, the theater of the absurd.

MODERN LANGUAGES

404 (Former 304). Advanced Grammar and "Explication de texte". (AS) Spring (3) Mr. St. Onge. *Prerequisite: French 205 and another 200 course or the equivalent.*

Advanced syntax and intensive written work.

405 (Former 305). Advanced Conversation I. (AS) Fall (3) Staff. *Prerequisite: French 206 or another 200 course or the equivalent.* Required of all concentrators.

Advanced intensive oral-aural training.

406 (Former 306). Advanced Conversation II. (AS) Spring (3) Staff. *Prerequisite: French 405 or the equivalent.*

Advanced intensive oral-aural training.

407 (Former 307). French Phonetics and Diction. (AS) Spring (3) Mr. Oustinoff. *Prerequisite: French 206 and another 200 course or the equivalent.* This course may be taken concurrently with French 406. Recommended for students who expect to teach French in high school.

Intensive study of phonetics, with particular attention given to the exceptions to the "rules" of French pronunciation and to individual problems.

408 (Former 405). Advanced Writing in French. (AS) Fall (3) Mr. Cloutier. *Prerequisite: French 404 or the equivalent.*

An intensive course in writing and language analysis.

431. The French Theatre. (As) Fall (3) Mr. Coke. *Prerequisite: Concentrators must have completed nine hours of 300 or 400 literature courses; non-concentrators must have the consent of the instructor.*

A critical study of the development of the theatre in France from the Renaissance to modern times.

450. Seminar in French Literature. (AS) Fall and Spring (3) Staff. *Prerequisite: at least nine hours of 300 or 400 literature courses and Senior standing.*

Recommended for concentrators who expect to continue with graduate study. A study in depth of a limited literary topic. Students will write and present papers for critical discussion.

495-496. Honors. Fall and Spring (3,3) Staff. (See page 00)

GERMAN

Requirements for Concentration

Twenty-seven semester credits are required for concentration in German including German 207, 301, 302, 303, 305 and at least three courses from the 400 level. These courses are also open to qualified students who are not concentrating in German.

DESCRIPTION OF COURSES

101-102. Elementary German. Fall and Spring (4,4) Staff. Students who have acquired two high school units in German may not take German 101-102 for credit.

Training in pronunciation, grammar, aural-oral comprehension with the use of audio-visual techniques. *Three Class Hours, Two Laboratory Hours.*

201. Graded Readings in German Prose. Fall (3) Staff. *Prerequisites: German 101 and 102 or the equivalent.*

A grammar review with prose readings.

MODERN LANGUAGES

202. Readings in Masterpieces of German Literature. *Fall and Spring* (3) Staff. *Prerequisite: three high school units or 201 or the equivalent.*

Selected readings from the masterpieces of German literature.

204. Scientific German. *Fall and Spring* (3) Mr. G. Smith. *Prerequisite: German 201 or the equivalent.*

Reading of scientific texts in chemistry, physics, biology, and general science.

205. Intermediate Grammar and Composition. *Fall and Spring* (3) Miss Backhaus, Mr. Kallos. *Prerequisite: four high school units or 202 or the equivalent.*

Review of main principles of syntax; composition.

206. Intermediate Conversation. *Fall and Spring* (3) Mrs. Diduk. *Prerequisite: German 205 or the equivalent.*

Phonetics; intensive oral-aural training; discussions of topics in German life and culture; student presentations.

207. The German-Speaking Peoples and Their Civilization. (AS) *Fall and Spring* (3) Mrs. Diduk. *Prerequisite: four high school units or 202 or the equivalent.*

Reading course embodying the most important elements of Germanic Civilization, designed as an introductory step to the 300 courses.

208. Introduction to German Literature. (AS) *Fall and Spring* (3) Mr. J. Smith. *Prerequisite: German 207 or the equivalent.*

A study and discussion of the representative genres of German literature, designed as an introductory step to the 300 courses.

297, 298. Survey of Twentieth Century German Literature in English. (AS) *Fall and Spring* (3,3) Mr. Kallos, Mrs. Diduk. *Not open to concentrators in German.*

A survey of twentieth-century masterpieces of German literature. First semester: the novel and novelle; second semester: drama and poetry.

301. German Literature from the Beginning to 1700. (AS) *Fall* (3) Mr. Kurtz. *Prerequisite: German 207 or the equivalent.*

A survey of German Literature from its beginning to the end of the Baroque.

302. German Literature from 1700 to 1830. (AS) *Spring* (3) Miss Backhaus. *Prerequisite: German 207 or the equivalent.*

A survey of German Literature covering the periods of Enlightenment, Classicism and Romanticism.

303. German Literature from 1830 to the Present. (AS) *Fall* (3) Mr. G. Smith. *Prerequisite: German 207 or the equivalent.*

A survey of German Literature covering the periods of Poetic Realism, Naturalism and the Modern Age.

305. Advanced Grammar and Composition. (AS) *Fall* (3) Miss Backhaus. *Prerequisite: German 205 or the equivalent.*

Advanced syntax and intensive written work in essays.

306. Advanced Conversation. (AS) *Spring* (3) Mrs. Diduk. *Prerequisite: German 206 or the equivalent.*

Advanced intensive oral-aural training. Discussions of German society & current affairs.

MODERN LANGUAGES

397, 398. Contemporary German Authors in English Translation. (AS) *Fall and Spring* (3,3) Staff. Open to concentrators in German with the approval of the Dept.

The study in depth of a significant German writer of modern times. First semester: Hermann Hesse.

401. The Romantic Age. (AS) *Fall* (3) Mr. Zimmerman. *Prerequisite: German 302 or the equivalent.*

An intensive study of the literary masterpieces of the period between 1790 and 1830.

402. Twentieth Century German Literature. (AS) *Spring* (3) Mr. Kallos. *Prerequisite: German 303 or the equivalent.*

An intensive study of the literature of our own age, with emphasis on the drama and the novel.

403. German Poetry. (AS) *Fall* (3) Mr. Kelley. *Prerequisite: One of the 300-level survey courses or the equivalent.*

Reading and interpretation of outstanding poetic works from the seventeenth century to the present.

404. Goethe. (AS) *Spring* (3) Mr. Zimmerman. *Prerequisite: 302 or the equivalent.*

Reading and interpretation of Goethe's works with emphasis on the pedagogical aspects of the novel and the philosophical aspects of *Faust*.

405. Nineteenth Century German Drama. (AS) *Fall* (3) Miss Backhaus. *Prerequisite: German 303 or the equivalent.*

An intensive study of German Drama of the period from 1830 to 1900. (Not offered 1973-74.)

406. History of the German Language. (AS) *Spring* (3) Mr. Kurtz. *Prerequisite: German 207 or the equivalent.*

A study of the history of the German Language from its origins to the present. (Not offered 1972-73).

495-496. Honors. *Fall and Spring* (3,3) Staff. (See page 00)

ITALIAN

101-102. Elementary Italian. *Fall and Spring* (4,4) Staff. Students who have acquired two high school units of Italian may not take Italian 101-102 for credit.

Training in pronunciation, grammar, aural-oral comprehension with use of audio-visual techniques. *Three Class Hours, Two Laboratory Hours.*

201. Intermediate Italian. *Fall* (3) Miss Basso. *Prerequisites: Italian 101 and 102 or the equivalent.*

A reading course which includes composition and oral practice.

202. Readings in Italian Literature. *Spring* (3) Miss Basso. *Prerequisite: Italian 201 or the equivalent.*

Selected readings from the literature of the eighteenth, nineteenth and twentieth centuries.

206. Intermediate Conversation. *Fall and Spring* (3) Miss Basso. *Prerequisite: Italian 202 or the equivalent.*

Phonetics; intensive oral-aural training.

MODERN LANGUAGES

301. Masterpieces of Italian Literature Since the 17th Century. (AS) *Fall* (3) Miss Basso. *Prerequisite:* four high school units or 202 or the equivalent.

Survey of Italian Literature. Study of representative works.

302. Masterpieces of Italian Literature from the Beginnings to the 17th Century. (AS) *Spring* (3) Miss Basso. *Prerequisite:* Italian 301 or the equivalent.

Survey of Italian Literature. Study of representative works.

RUSSIAN

101-102. Elementary Russian. *Fall and Spring* (4,4) Mrs. Netick. Students who have acquired two high school units of Russian may not take Russian 101-102 for credit.

Training in pronunciation, aural-oral comprehension with use of audio-visual techniques.

201. Intermediate Russian. *Fall* (3) Mrs. Netick. *Prerequisites:* Russian 101 and 102 or the equivalent.

Review of the fundamentals of grammar and pronunciation and reading of moderately difficult texts.

202. Readings in Masterpieces of Russian Literature. *Spring* (3) Mrs. Netick. *Prerequisite:* Russian 201 or the equivalent.

Selected readings from Russian literature of the 19th century.

297, 298. Survey of Russian Literature in English. (AS) *Fall and Spring* (3,3) Mrs. Netick.

A chronological survey of Russian literature from its beginning to the Soviet Period, with emphasis given to the major writers of the 19th century.

301. Survey of Russian Literature from the Beginning to 1850. (AS) *Fall* (3) Mrs. Netick. *Prerequisite:* four high school units or 202 or the equivalent.

Survey of literature up to 1850. Study of representative works.

302. Survey of Russian Literature from 1850 to the Present. (AS) *Spring* (3) Mrs. Netick. *Prerequisite:* Russian 301 or the equivalent.

Survey of Russian literature from 1850 to the present. Study of representative works.

305, 306. Directed Reading in Russian Literature. *Fall and Spring* (3,3) Mrs. Netick. *Prerequisite:* Russian 301 and 302 or the equivalent.

This course is designed to permit the student to pursue in depth an area of literature in which he has a major interest.

SPANISH

Requirements for Concentration

The following courses are required for concentration in Spanish; and should be taken in this order: 301, 302, 303, 305, 306 and four of the following courses: 401, 402, 403, 404, 405, 406.

DESCRIPTION OF COURSES

101-102. Elementary Spanish. *Fall and Spring* (4,4) Staff. Students who have acquired two high school units in Spanish may not take Spanish 101-102 for credit.

MODERN LANGUAGES

Training in pronunciation, grammar, aural-oral comprehension with the use of audio-visual techniques. *Three Class Hours, Two Laboratory Hours.*

201. Intermediate Spanish Reading. *Fall and Spring* (3) Staff. *Prerequisite: two high school units or the equivalent. Students who have acquired three high school units in Spanish may not take 201 for credit.*

A reading course which includes a grammar review.

202. Readings in Modern Literature. *Fall and Spring* (3) Staff. *Prerequisite: three high school units or Spanish 201 or the equivalent.*

Selected readings from the literature of the nineteenth and twentieth centuries.

205. Intermediate Grammar and Composition. *Fall and Spring* (3) Mr. Banner. *Prerequisite: Spanish 202 or the equivalent.*

Review of main principles of syntax; composition.

206. Intermediate Conversation. *Fall and Spring* (3) Mr. Lavin. *Prerequisite: Spanish 205 or the equivalent.*

Phonetics; intensive oral-aural training.

207. The Spanish Heritage. (AS) *Fall* (3) Staff. *Prerequisite: four high school units or 202 or the equivalent.*

Reading course embodying the most important elements of Hispanic civilization, designed as an introductory step to the 300 courses in literature.

208. Readings in Masterpieces of Spanish Literature. (AS) *Spring* (3) Staff. *Prerequisite: four high school units or 202 or the equivalent.*

Selected reading from Spanish literature from the beginning to the present. A reading course designed as an introductory step to 300 courses in literature.

297. Cervantes in English Translation. (AS) *Fall* (3) Mr. Cox. *Not open to concentrators in Spanish.*

A study of the life and works of Cervantes. The main focus will be on the interpretation of *Don Quixote*.

298. Selected Spanish Authors in English Translation: Federico García Lorca. (AS) *Spring* (3) Mr. Goff. *Not open to concentrators in Spanish.*

An intensive study of the drama and poetry of Federico García Lorca.

301. Spanish Literature from the Beginning to 1700. (AS) *Fall* (3) Mr. Moore. *Prerequisite: Spanish 207 or 208 or the equivalent.*

Survey of Spanish literature from its beginning to the end of the Golden Age. Study of representative works.

302. Spanish Literature from 1700 to the Present Time. (AS) *Spring* (3) Mr. Banner. *Prerequisite: Spanish 301 or the equivalent.*

Survey of Spanish literature from 1700 to the present. Study of representative works.

303. Advanced Grammar and Composition. (AS) *Spring* (3) Mr. Stone. *Prerequisite: Spanish 205 and another 200 course or the equivalent.*

Advanced syntax and intensive written work.

305, 306. Advanced Conversation. (AS) *Fall and Spring* (3,3) Mr. Stone. *Prerequisite: Spanish 206 and another 200 course or the equivalent.*

Advanced intensive oral-aural training.

MODERN LANGUAGES

401. The Novel. (AS) Fall (3) Mr. Stone. *Prerequisite: Spanish 301 and 302 or the equivalent.*

Survey of the early novel with detailed study of the modern novel since Romanticism. Study of representative works.

402. Drama of the Golden Age. (AS) Fall (3) Mr. Lavin. *Prerequisite: Spanish 301 and 302 or the equivalent.*

Survey of the drama from its beginning. Detailed study of the drama of the Golden Age. Study of representative works.

403. Cervantes. (AS) Spring (3) Mr. Moore. *Prerequisite: Spanish 301 and 302 or the equivalent.*

The life and works of Cervantes with particular emphasis on the Quijote and the Novelas Ejemplares.

404. Drama of the 19th and 20th Centuries. (AS) Spring (3) Mr. Cox. *Prerequisite: Spanish 301 and 302 or the equivalent.*

Principal movements and authors in the drama of the 19th and 20th centuries. Study of representative works.

405. Directed Reading in Spanish Literature. (AS) Spring (3) Mr. Banner. *Prerequisite: Spanish 301 and 302 or the equivalent.*

This course is designed to permit the student to pursue in depth an area of literature in which he has a major interest.

406. Survey of Spanish American Literature. (AS) Spring (3) Mr. Hoffman. *Prerequisite: Spanish 301 and 302 or the equivalent.*

Principal literary movements in Spanish America. Study of representative works.

495-496. Honors. Fall and Spring (3,3) Staff.

Students admitted to Honors Study in Modern Languages will be enrolled in this course during both semesters of their senior year. The course comprises (a) supervised reading of a general bibliography in the language and literature of the student's field of concentration; (b) supervised reading of a special bibliography in the field of the student's major interest; (c) presentation by May 1 of a satisfactory Honors Essay in the field of the student's major interest; and (d) satisfactory performance in a comprehensive oral examination in the field of the student's major interest.

Music

ASSOCIATE PROFESSOR PALEDES (*Chairman of the Department*). PROFESSORS FEHR, STEWART, TRUESDELL ¹ and VARNER. LECTURERS DARLING, KOLLER, KNORR, LEND-VAY, ROARK, and VERNON.

The Department of Music offers concentration in music appropriate for (1) prospective school music teachers; (2) students who desire a broad liberal arts program as cultural enrichment with the emphasis on music in combination with the other arts and humanities; and (3) students who desire a liberal arts base for later advanced specialization; i.e., musicologist, composer, music librarian and college music teacher.

REQUIREMENTS FOR CONCENTRATION

The basic requirements for concentration in Music include 12 credits in Music Theory (Music 201, 202, 301, and 302); 6 credits in Music History (Music 311 and 312); 8 credits in Applied Music Instruction, in one field; and 10 more credits in music as indicated in the special concentration programs or in consultation with the Head of the Department. Proficiency at the Elementary Piano level is considered basic to all programs and is a requirement for graduation. All concentrators in Music are expected to participate in a senior recital, in lieu of which a term paper, an instrumental or choral arranging project, or an original musical composition may be accepted with Departmental approval.

Concentrators in Music are required to complete Senior level Applied Music Instruction courses in their major applied music field for graduation. In addition, they should complete courses in both instrumental and vocal techniques if their emphasis is in Music education.

Students preparing for the Virginia State College Professional Certificate are required by the Virginia Board of Education to qualify in general as indicated in the Education section of this catalog. Upgraded secondary specific endorsement requirements effective July 1, 1968 may be met if Theory 201 is begun in the sophomore year and Applied Music Instruction is begun in the Freshman year.

SPECIAL CONCENTRATION PROGRAMS IN PREPARATION FOR THE VIRGINIA COLLEGIATE PROFESSIONAL CERTIFICATE IN MUSIC

Applied Music Ensemble.	2-3
Music 327—Choral Conducting.	
or	1-2
Music 328—Instrumental Conducting.	
Music 321—Music in the Elementary School.	
or	3
Music 322—Music in the Secondary School.	
Music 323, 324, 325—Instrumental Techniques	
or	
2 Semesters of Instrumental Techniques.	6-7
and	
Music 326—Choral Material and Procedures	
	17-18

¹ Chairman of the Department, 1972-73

MUSIC

RECOMMENDED PROGRAMS FOR THE FIRST TWO
YEARS

FRESHMAN YEAR

English.	6
Foreign Language	6-8
Physics 103, 104 is recommended	8
Music 201, 202—Theory I	6
Applied Music Instruction	2
Physical Education	2
	<hr/> 30-32

SOPHOMORE YEAR

English 203, 204.	6
Foreign Language.	6
History 101, 102.	6
Music 301, 302—Theory II.	6
Music 323, 324—Instrumental Techniques.	4
Applied Music Instruction (Piano).	2
Physical Education.	2
Applied Music Ensemble.	2
	<hr/> 34

Special concentration programs are available in Theory and Music History and Literature.

DESCRIPTION OF COURSES

Theory

101. Introduction to Theory. *Fall and Spring* (2) Mr. Stewart.

Fundamental terms and concepts of music, the elements of notation, scales and tone systems. May not be included in music concentration. This course does not automatically enroll a student in Applied Music Ensemble; i.e., band, choir, et cetera. Students will be placed in sections according to their background.

102. Introduction to Form and Style. *Spring* (2) Mr. Stewart.

The underlying principles of musical structure. May not be included in music concentration.

***201-202. Theory I.** *Fall and Spring* (3,3) Mr. Stewart.

Review of theory fundamentals; elementary harmony; the uses of triads, seventh chords and non-chord tones are learned through exercises, diction, ear training and keyboard harmony.

301-302. Theory II. *Fall and Spring* (3,3) Mr. Stewart. *Prerequisite:* Music 201-202.

Advanced harmony, dealing with simple and extended alteration, secondary dominants, and advanced modulation. Second semester, application of harmonic techniques to elementary composition.

401-402. Form and Analysis. *Fall and Spring* (2,2). *Prerequisite:* Music 301-302. (Not offered 1973-74)

The structural processes and forms of music, studied through analysis of examples of various periods and styles.

MUSIC

403, 404. Orchestration and Choral Arranging. *Fall and Spring* (2,2) Mr. Stewart and Mr. Truesdell. *Prerequisite:* Music 301. (Not offered 1973-74)

Fall, orchestration; Spring, choral arranging.

405, 406. Counterpoint. *Fall and Spring* (2,2) Mr. Truesdell and Mr. Stewart. *Prerequisite:* Music 301.

Fall, counterpoint in the 16th century style of the motet, the madrigal and the Mass. Spring, counterpoint in the style of J. S. Bach.

***150. Freshman Colloquium.** *Fall* (3) Mr. Truesdell.

The antecedents and development of Jazz to the present. Students should have some musical background and knowledge of musical terminology. If this is lacking, students should register for Music 101 as a corequisite for the course.

211, 212. Introduction to Music. (A) *Fall and Spring* (3,3) Mr. Paledes. A section of this course will be offered as a Freshman Colloquium.

This course is designed to meet the needs of students interested in music, without regard to previous training and experience. It is not open to juniors or seniors concentrating in Music. The course traces the development of the art of music through the various historical periods, and familiarizes the student with the more important composers and their works. A synopsis of style, form, and theory is included. The Freshman Colloquium may not satisfy an Area requirement.

***311, 312. History.** *Fall and Spring* (3,3) Mr. Truesdell. *Prerequisite:* Music 201-202.

Fall, Ancient Greeks to 1800; Spring, 1800 to present. Includes readings, reports, notated and recorded examples of all periods of western cultures.

313. Great Composers. (A,S) *Fall* (2) Mr. Truesdell.

Major composers and works representative of various styles will be studied. The course is conducted on an intermediate level, and is not open to Music concentrators. (Not offered 1973-74)

314. The Symphony. (A,S) *Spring* (2) Mr. Truesdell.

A study of representative symphonic works of various points; their style, form and orchestral setting. The course is conducted on an intermediate level, and is not open to Music concentrators. (Not offered 1973-74)

315, 316. Opera. (A,S) *Fall and Spring* (2,2) Mr. Truesdell.

Plots, music, background of selected masterpieces from the standard operatic repertoire. Fall: Italian *bel canto* and French Grand Opera. Spring: German Romantic Opera, Wagner, Strauss, Nationalists, and Modern developments. Not open to Music concentrators.

***318. American Musical Theatre.** *Spring* (3) Messrs. Paledes and Scammon.

A study of American operetta and musical comedy from the Colonial period to the present. Representative works from various periods will be studied with respect to their musical and dramatic styles. Students will be required to prepare excerpts for class performance and analysis. Same as Theatre 330.

413, 414. Problems in Music. *Fall or Spring* (2-3,2-3) Mr. Truesdell and staff. For seniors only.

Directed independent study resulting in a thesis.

MUSIC EDUCATION

320. Music for Elementary School Teachers. *Fall and Spring* (3,3) Mr. Varner.

MUSIC

A course designed for prospective general teachers in the elementary grades. Not open to Music concentrators.

***321. Music in the Elementary School.** *Fall* (3) Mr. Varner.

Problems confronting the teacher of music in the elementary schools, and methods of instruction appropriate to the several grades. Primarily for Music concentrators.

***322. Music in the Secondary School.** *Spring* (3) Mr. Varner.

Materials and methods of instruction on the secondary school level.

***323, 324, 325. Instrumental Techniques, Materials and Methods.** *Fall or Spring* (2,2,2) Mr. Varner.

Three courses are assigned, one each to woodwinds, brass, and strings; the development of performance skills and a study of the materials and methods of teaching. Percussion is correlated throughout.

***326. Choral Materials and Procedures.** *Fall* (3) Mr. Fehr. *Prerequisite:* Music 201-202.

A study of vocal and choral techniques and teaching methods.

***327, 328. Choral and Instrumental Conducting.** *Fall and Spring* (1-2,1-2) Mr. Fehr and Mr. Varner. *Prerequisite:* Music 201-202.

Study and practice in the techniques of the baton; problems of organizing musical groups.

†521, 522. Graduate Seminar in Music. *Fall or Spring* (2-3,2-3) Staff.

Directed independent study resulting in a thesis.

APPLIED MUSIC

The College offers individual and group instruction in Voice, and individual instruction in Piano, Organ, Strings, Woodwinds, and Brass.

A maximum of 10 credits may be earned through instruction courses, and a maximum of four credits may be earned through participation in musical organizations. Prerequisite or corequisite for credit in Applied Music is Music 101 or 201-202, etc. No credit in Applied Music is given until this requirement is met. Approval of the Head of the Department is required for all courses and ensembles in Applied Music except auditors in band, orchestra and choral organizations.

Applied Music as an elective earns one credit. Advanced students meeting exceptional standards and requirements may earn two credits.

Individual instruction in Applied Music is given on the basis of 30-minute private lessons once or twice weekly. Minimum preparation for each 30-minute lesson per week is one hour of daily practice.

SCHEDULE OF FEES PER SEMESTER

One hour of group instruction per week.	\$ 44.00
One 30-minute lesson per week.	108.00

ENSEMBLE

*131. Band	<i>Fall and Spring</i> (1,1) Mr. Varner
*132. Choir	<i>Fall and Spring</i> (1,1) Mr. Fehr
*133. Chorus	<i>Fall and Spring</i> (1,1) Mr. Fehr
*134. Orchestra	<i>Fall and Spring</i> (1,1) Mr. Stewart

MUSIC

CLASS INSTRUCTION

‡*Voice Class. Mr. Fehr.

- 141. I, II. Elementary Voice Class. *Fall and Spring* (1,1)
- 241. I, II. Intermediate Voice Class. *Fall and Spring* (1,1)

INDIVIDUAL INSTRUCTION

‡*Voice 051-451. Mr. Roark.

- 151. I, II. Elementary Voice. *Fall and Spring* (1,1)
- 251. I, II, III, IV. Intermediate Voice. *Fall and Spring* (1,1,1,1)
- 351. I, II. Senior Voice. *Fall and Spring* (1,1)
- 451. I, II, III, IV. Advanced Voice. *Fall and Spring* (1-2,1-2,1-2)

‡*Piano 052-452. Mrs. Knorr, Mrs. Lendvay, Mr. Paledes, Mr. Truesdell, and Miss Vernon.

- 152. I, II. Elementary Piano. *Fall and Spring* (1,1)
- 252. I, II, III, IV. Intermediate Piano. *Fall and Spring* (1,1,1,1)
- 352. I, II. Senior Piano. *Fall and Spring* (1,1)
- 452. I, II, III, IV. Advanced Piano. *Fall and Spring* (1-2,1-2,1-2,1-2)

‡*Organ 153-453. Mr. Darling and Mrs. Koller.

- 153. I, II. Elementary Organ. *Fall and Spring* (1,1)
- 253. I, II, III, IV. Intermediate Organ. *Fall and Spring* (1,1,1,1)
- 353. I, II. Senior Organ. *Fall and Spring* (1,1)
- 453. I, II, III, IV. Advanced Organ. *Fall and Spring* (1-2,1-2,1-2,1-2)

‡*Strings 154-454. Mr. Stewart.

- 154. I, II. Elementary Strings. *Fall and Spring* (1,1)
- 254. I, II, III, IV. Intermediate Strings. *Fall and Spring* (1,1,1,1)
- 354. I, II. Senior Strings. *Fall and Spring* (1,1)
- 454. I, II, III, IV. Advanced Strings. *Fall and Spring* (1-2,1-2,1-2,1-2)

‡*Woodwinds 155-455. Mr. Varner.

- 155. I, II. Elementary Woodwinds. *Fall and Spring* (1,1)
- 255. I, II, III, IV. Intermediate Woodwinds. *Fall and Spring* (1,1,1,1)
- 355. I, II. Senior Woodwinds. *Fall and Spring* (1,1)
- 455. I, II, III, IV. Advanced Woodwinds. *Fall and Spring* (1-2,1-2,1-2,1-2)

‡*Brass 156-456. Staff.

- 156. I, II. Elementary Brass. *Fall and Spring* (1,1)
- 256. I, II, III, IV. Intermediate Brass. *Fall and Spring* (1,1,1,1)
- 356. I, II. Senior Brass. *Fall and Spring* (1,1)
- 456. I, II, III, IV. Advanced Brass. *Fall and Spring* (1-2,1-2,1-2,1-2)

‡*Percussion 157-457. Staff.

- 157. I, II. Elementary Percussion. *Fall and Spring* (1,1)
- 257. I, II, III, IV. Intermediate Percussion. *Fall and Spring* (1,1,1,1)
- 357. I, II. Senior Percussion. *Fall and Spring* (1,1)
- 457. I, II, III, IV. Advanced Percussion. *Fall and Spring* (1,1,1,1)

PROJECT PLUS

PROFESSOR BEYER (*Director*)

Project PLUS is an academic and residential program in which all of the 84 participating students, resident in the Project building, take part of their academic work together. The Forum and the ten tutorials offered for the 1973-74 session all center on the theme selected for this year "Conflict and Conflict Resolution." While the Forum provides a comprehensive and integrative approach to the theme, the tutorials deal with subordinate topics. They are all interdisciplinary in character.*

Each student registers each semester in the single weekly Forum and in one tutorial thereby earning four elective credits for this combined enrollment. Students are graded by their instructors on a Pass/No Credit basis. A junior or a senior by his enrollment in Project PLUS will thereby utilize the Pass/No Credit option available to him as a junior or a senior whichever the case may be. A sophomore enrolled in Project PLUS will continue to have the option of taking two courses on a Pass/No Credit basis when he becomes a junior and a senior.

The instructors teaching the tutorials are drawn from the different departments and in most cases teach for only one semester. Because the nature of Project PLUS requires flexibility at the advanced planning stages, it is not possible to include here a complete list of the instructors nor a list of the tutorial topics that will be offered.

For the 1972-73 session the theme was "The Future of Technological Society." Under the academic format effective for that year each student enrolled each semester in one of three colloquia and in one of 14 tutorials. Colloquium themes, which were more comprehensive in character, were: "Science, Technology and the Concept of Man," "Science, Technology and Society," and "Science, Technology and the Arts." The topics of some representative tutorials were: "Art and Technology," "Higher Education and the Future of Technology," "Processes of Technological Development and Control," "Politics and Technology," and "Humour and Technology."

201, 202 Forum on Conflict and Conflict Resolution - Fall and Spring, Staff

- 201T-1** Tutorial *Fall* (4) Mr. Zamora
- 201T-2** Tutorial *Fall* (4) Mr. Ball
- 201T-3** Tutorial *Fall* (4) Mr. Ward
- 201T-4** Tutorial *Fall* (4) Mr. Strong
- 201T-5** Tutorial *Fall* (4) Mr. Prosl
- 201T-6** Tutorial *Fall* (4) Mr. Fuchs
- 201T-7** Tutorial *Fall* (4) Mr. Crownfield
- 201T-8** Tutorial *Fall* (4) Mr. Van Horn
- 201T-9** Tutorial *Fall* (4) TBA
- 201T-10** Tutorial *Fall* (4) TBA
- 202T-1** Tutorial *Spring* Mr. Altshuler
- 202T-2** Tutorial *Spring* Mr. Scholnick
- 202T-3** Tutorial *Spring* TBA
- 202T-4** Tutorial *Spring* Mr. Crapol
- 202T-5** Tutorial *Spring* Mr. Prosl
- 202T-6** Tutorial *Spring* Mr. Bohl
- 202T-7** Tutorial *Spring* TBA
- 202T-8** Tutorial *Spring* TBA
- 202T-9** Tutorial *Spring* TBA
- 202T-10** Tutorial *Spring* TBA

*For information on general objectives, admissions policies, etc., see pages 33 and 59. Brochures are available on request from the Director of Honors and Experimental Programs.

PHILOSOPHY

PROFESSORS JONES (*Chairman of the Department*) and MACDONALD,¹ ASSOCIATE PROFESSORS COBB,² FOSTER, HARRIS,³ HEARN, MCLANE, and REED. ASSISTANT PROFESSORS BOHL and FUCHS. LECTURER KING.⁴

REQUIREMENTS FOR CONCENTRATION

A student whose aim is to use a concentration in Philosophy as a basis for a liberal education may take the minimum concentration requirement of twenty-seven hours in the Department. Those who wish to prepare for graduate study in philosophy or a related discipline will normally take more than this required minimum. No specific set of courses is prescribed for all concentrators. However, every concentrator should have some acquaintance with the history of philosophy, various types of philosophy, alternative philosophical methodologies, and with advanced analysis of particular philosophers and contemporary philosophical issues. A program for each concentrator will be developed through consultation with members of the philosophy faculty.

DESCRIPTION OF COURSES

101, 102. Introduction to Philosophy. (A) *Fall and Spring* (3,3) Staff. One may not receive credit for both Philosophy 101, 102 and 201, 202.

An introduction to the problems, methods and scope of philosophical enquiry. Topics to be studied are selected on the basis of their relevance to other aspects of liberal education as well as for their intrinsic philosophical interest. Examples of such topics are free will and scientific determinism, moral relativism and skepticism, the question of God's existence, the nature and aims of education, and problems of man and society such as civil disobedience and violence.

150. Freshman Seminar. *Fall and Spring* (3) Mr. Foster and Mr. Hearn.

201, 202. The History of Philosophy. (A) *Fall and Spring* (3,3) Mr. MacDonald and Staff. One may not receive credit for both Philosophy 101, 102 and 201, 202.

An historical introduction to philosophy based on readings from the works of various philosophers such as Plato, Aristotle, Lucretius, and Aquinas during the first semester; Descartes, Hume, Kant, Mill, and Russell during the second semester.

301. Introduction to Logic. (S) *Fall and Spring* (3) Mr. Harris, Mr. McLane, and Mrs. Reed.

An introduction to principles of valid reasoning with special emphasis on modern symbolic techniques and their uses.

303. Ethics. (AS) *Fall and Spring* (3) Mr. Foster, Mr. Fuchs, Mr. Hearn, Mr. Jones and Mrs. Reed.

A philosophical examination of problems and theories about such topics as good and evil, right and wrong, pleasure, choice, duty, happiness, and the good life.

304. Aesthetics. (AS) *Fall* (3) Mr. Foster.

A philosophical analysis of the nature of aesthetic experience and its objects. Special attention will be given to apprehension and judgment, concepts, and criteria, and meaning and truth in the arts.

¹ Chairman of the Department, 1972-73.

² On leave of absence second semester 1973-74.

³ Visiting Associate Professor second semester 1973-74.

⁴ First semester 1972-73.

PHILOSOPHY

305. Social and Political Ideology and Philosophy. (AS) *Fall and Spring* (3) Mr. Bohl and Mr. Fuchs.

A philosophical examination of major social and political concepts such as authority, justice, law, obligation, and rights. Special attention will be given to the use of these ideas in ideologies such as Communism, Fascism, and Democracy.

306. Philosophical Problems. (AS) *Fall* (3) Staff. *Prerequisites:* Two courses in Philosophy. (Not offered 1973-74)

A study of such major philosophical problems as those concerning knowledge and reality, morality and conduct, and art and beauty. Special attention will be devoted to philosophical method.

311. Philosophy of Religion. (AS) *Spring* (3) Mrs. Reed.

A philosophical investigation of the nature of religious experience, activity, and belief. The course will also include an examination of such concepts as those of God, freedom, and immortality.

313. Introduction to the Philosophy of Science. (AS) *Fall* (3) Mr. McLane.

A philosophical examination of the nature, validity, and significance of scientific inquiry. Special attention will be given to the descriptive, explanatory, and predictive aspects of scientific theories.

321. Existentialism. (AS) *Fall and Spring* (3) Mr. Cobb and Mr. McLane.

An examination of important aspects of existentialism with readings in such philosophers as Kierkegaard, Nietzsche, Jaspers, and Sartre. Some attention will also be given to the impact of these philosophical movements upon contemporary literature, religious thought, and psychology.

322. American Philosophy. (S) *Fall* (3) Mrs. Reed. *Prerequisites:* Two courses in Philosophy or consent of the instructor. (Not offered 1973-74.)

A study of readings selected from the works of such philosophers as Edwards, Jefferson, Peirce, Royce, James, Dewey, Santayana, and Whitehead.

323. Indian Philosophy. (S) *Fall* (3) Mr. Foster. *Prerequisites:* Two courses in Philosophy or consent of the instructor.

A survey of the major philosophers and systems of thought in South Asia. The cultural, philosophical and religious context is afforded through consideration of the *Upanishads* and *Bhagavad-Gita* and study is devoted to such systems as Jainism, early Buddhism, Samkhya and the Hindu systems of Yoga, Nyaya-Vaisesika, and Vendanta.

324. Oriental Philosophy. (S) *Spring* (3) Mr. Foster. *Prerequisites:* Two courses in Philosophy or consent of the instructor.

A survey of the major philosophers and systems of thought in East Asia. Study will be devoted to Confucius, Mo Tzu, Mencius and Taoism and to the development of Mahayana, Tibetan and Zen Buddhism.

331. Greek Philosophy. (S) *Fall* (3) Mr. Fuchs. *Prerequisites:* Two courses in Philosophy or consent of the instructor.

A critical examination of representative Greek philosophers with special emphasis on Plato and Aristotle.

332. Medieval Philosophy. (S) *Fall* (3) Mrs. Reed. *Prerequisites:* Two courses in Philosophy or consent of the instructor.

Analysis of selected writings of major medieval philosophers such as Augustine, Erigena, Anselm, Maimonides, Bonaventure, Aquinas, Scotus, and Occam.

PHILOSOPHY

333. Continental Rationalism. (S) Spring (3) Mr. Foster. *Prerequisites:* Two courses in Philosophy or consent of the instructor.

A critical examination of representative rationalist systems with special emphasis on Descartes, Spinoza, and Leibniz.

334. British Empiricism. (S) Spring (3) Mr. MacDonald. *Prerequisites:* Two courses in Philosophy or consent of the instructor. (Not offered 1973-74.)

A critical examination of representative theories of empiricism with special emphasis on Locke, Berkeley, and Hume.

336. Contemporary Philosophy. (S) Fall (3) Mr. Bohl. *Prerequisites:* Two courses in Philosophy or consent of the instructor.

An examination of the major philosophical writings of this century.

342. Philosophy of Language. (S) Spring (3) Mr. Bohl. *Prerequisites:* Philosophy 336 and two other courses in Philosophy.

A survey of recent philosophical questions about language and meaning. Such topics as the following will be considered: reference, analyticity, speech acts, and semantic and syntactic theories. Among the authors that will be read are Russell, Austin, Quine, Chomsky and Katz.

***401. Theory of Knowledge.** (S) Spring (3) Mr. MacDonald.

An examination of philosophical theories about such topics as the nature and criteria of truth, perception and cognition, meaning, knowledge, and the validation of belief.

***402. Metaphysics.** (S) Spring (3) Mr. Jones. (Not offered 1973-74.)

The study of such concepts as those of substance and essence, time and eternity, matter and consciousness, truth, cause, and being. Critical examination of theories about such topics as mechanism and teleology, man and his place in nature, and the relation of the mind to the body.

***403. Advanced Ethics.** (S) Fall (3) Mr. Hearn.

A study of selected normative and critical problems in moral philosophy.

404. Advanced Logic. (S) Spring (3) Mr. McLane. *Prerequisite:* Philosophy 301 or consent of the instructor.

Systematic investigation of topics in logic drawn from such areas as system construction, proof theory, modal and deontic logic, and abstract set theory.

405. Phenomenology. (S) Spring (3) Mr. Cobb. *Prerequisite:* Philosophy 321 and three other courses in Philosophy. (Not offered 1973-74.)

A study of phenomenology as a philosophical method. Some attention will be given to the historical development of the method but the emphasis will be on dealing with particular philosophical problems. Readings will include some literary and psychological materials as well as philosophical writings by Husserl, Heidegger, and Merleau-Ponty, especially the latter.

***413. Philosophy of Mind** (S) Fall (3) Mr. McLane. (Not offered 1973-74.)

Critical analysis of theories concerning the nature of consciousness, the concept of person and personal identity, and some theories of the relation of the mind to the body. Attention will be devoted to the philosophical relevance of such sciences as psychology, physiology, and cybernetics.

***414. Philosophy of Social Science.** (S) Spring (3) Mr. Jones. (Not offered 1973-74.)

An examination of theories and methods in the social sciences. A comparison with

PHILOSOPHY

the natural sciences through consideration of such philosophical topics as the nature of explanation, concept formation, confirmation of theories, the relation of facts to values, the nature of human action, freedom and determinism, and moral issues involved in applied social science.

416. Philosophical Problems in Physical Science. (S) Spring (3) Mr. McKnight.¹ *Prerequisite: Either Philosophy 301 and Physics 101, 102 or consent of the instructor.* (Not offered 1973-74.)

A study of philosophical problems arising in classical physics and relativity and quantum theory. Special attention will be given to such topics as the status of observables, measurement, time, and elementary particles. The philosophical implications of contemporary physics will be discussed. (Same as Physics 416.)

***421. The Philosophy of Kant.** (S) Fall (3) Mr. MacDonald. (Not offered 1973-74).

Intensive study of *The Critique of Pure Reason* and selections from other writings of Kant.

***422. Great Philosophers.** (S) Spring (3) Mr. MacDonald.

A systematic study of the thought of a great philosopher such as Plato, Aristotle, Spinoza, Hume, or Wittgenstein. The particular philosopher to be studied is designated each time the course is offered.

431, 432. Senior Seminar in Philosophy (S) Fall and Spring (3,3) Staff.

A meeting of the Faculty of the Department with advanced students for the purpose of philosophical investigation. An important modern philosophical work is examined each semester and students are required to write and present papers for critical discussion.

441, 442. Advanced Reading in Philosophy. Fall and Spring (3,3) Staff. *Prerequisites: Eight courses in philosophy and consent of the Department.*

Individually supervised readings on special topics for advanced students.

HONORS STUDY

495, 496. Honors. Fall and Spring (3,3) Staff.

Students admitted to Honors Study in Philosophy will be enrolled in this course during both semesters of their senior year. The course comprises (a) supervised reading in the field of the student's major interest; (b) the preparation and presentation by May 1 of an Honors Essay; (c) the satisfactory completion of a written comprehensive examination based upon the student's courses of study; (d) the satisfactory performance in an oral examination on the Honors Essay.

¹ Professor of Physics.

Physical Education for Men

PROFESSOR H. SMITH (*Chairman of the Department*), ASSOCIATE PROFESSORS AGEE, HOOKER, JENSEN, JONES and LINKENAUER. ASSISTANT PROFESSOR DERRINGE. INSTRUCTORS ALBERT, BERRYHILL, BESNIER, HAYNIE and RANDOLPH

REQUIREMENTS FOR CONCENTRATION

The minimum number of semester credits required for concentration in Physical Education is 34 and must include Physical Education 203, 308, 310, 313, 408, 411, 413, 494, Biology 307 and 308 and any two of the following 316, 317, 412. All courses except Physical Education 203 and 208 of the concentration program should be taken during the student's junior and senior years.

Those students desiring to meet the professional requirements for certification in the State of Virginia must plan their programs with Mr. Linkenauer—major advisor. Students enrolling in professional courses to meet certification requirements in other states should first consult a member of the faculty of the School of Education.

Students who meet professional requirements for certification in the State of Virginia are qualified for a number of positions: teaching Physical Education in a consolidated school or a large secondary school; teaching Physical Education and a second subject in a small secondary school; coaching and directing athletics combined with the teaching of another subject or subjects; supervising physical education and recreation programs; summer camp work; and preparation for graduate study in Physical Education, Physical Therapy or Corrective Therapy.

PROGRAM FOR ADVANCED STUDY

Students who are qualified for advanced study and who have satisfied admission requirements may register for the Master of Arts Degree with concentration in Physical Education or for the degree of Master of Education with emphasis in Education and Physical Education as a related field. A minimum residence period of one regular session or of four summer sessions of nine weeks is required.

In addition to the general requirements for admission established by the College, students desiring to enter upon graduate study in Physical Education should present satisfactory undergraduate work in Physical Education or related fields, from a recognized institution.

A minimum of 15 credits of the total 30 submitted for the Master of Arts degree must be in the department of concentration. Other courses should be selected from related departments such as Education, Sociology and Biology, or selected from additional courses in Physical Education. For special requirements of the M.Ed. degree, write to the Dean of the School of Education.

DESCRIPTION OF COURSES

Students concentrating in other departments may elect physical education courses according to interest or to prepare for teaching combinations, recreation work, or other related fields.

101, 102, 201, 202. Required Physical Education. *Fall and Spring (1,1) Staff.*

There shall be no physical education requirement for students who demonstrate skills in four activities, one of which must be swimming. Other students are to complete as many as four semesters in a program of physical activity, depending on the number of skills on which they have earned exemptions. These requirements may be satisfied by electing an activity course offered by the Men's Department of Physical Education, by participating for a season in a varsity sport, or by passing one of the skills tests offered. Before completing four semesters, students are to demonstrate survival swimming skills unless medically excused.

Students with physical disabilities will be assigned to a special adapted sports class

PHYSICAL EDUCATION FOR MEN

on the recommendation of the College physician. Instruction is given in the following individual and group activities: advanced swimming and life saving, beginning swimming, badminton, basketball, fencing, golf, gymnastics, handball, lacrosse, soccer, scuba diving, tennis, track and field, volleyball, and wrestling.

203. Physical Education and Recreation for the Classroom Teacher. *Fall* (3) Mr. Agee.

Special emphasis given the role of motivation, skill transfer and retention as applied to physical education. Course primarily designed to emphasize fundamentals of basic skills, physical fitness testing, and individual and team activities on the elementary school level.

208. First Aid and Safety. *Spring* (3) Mr. Jensen.

Instruction focuses on the Standard and Advanced Red Cross First Aid. Safety projects, problems, and the organization of materials, methods and techniques are developed. *Lectures and laboratories four hours.*

308. Applied Anatomy and Kinesiology. *Fall* (3) Mr. Linkenauger. *Prerequisite:* Biol. 308.

A study of the principles of human motion. Anatomical and mechanical analysis of individual skills in physical education activities is stressed.

309. Driver Education.¹ *Fall or Spring* (3) Mr. Jones.

Critical analysis of traffic accidents attitude factors, and essential knowledges are developed. The laboratory phase will include the use of psychophysical and psychological tests and actual practice-teaching behind the wheel. *Lectures and laboratories four hours.*

310. History and Principles of Physical Education. *Fall* (3) Mr. Jensen.

This course is an orientation in the history and principles of physical education, health, and recreation.

313. Advanced Gymnastics and Track & Field. *Spring* (2) Mr. Haynie and Mr. Randolph.

A detailed study and development of demonstrable skills with considerable emphasis on exhibition planning and coaching techniques in the course design. *Lectures and laboratories four hours.*

316. Advanced Baseball, Wrestling. *Spring* (2) Mr. Jones and Mr. Besnier.

This course is structured so as to give special attention to the approved scientific techniques of coaching and the students' acquisition of advanced demonstrable skills. *Lectures and laboratories four hours.*

317. Theory and Practice of Coaching Soccer and Lacrosse. *Fall* (2) Mr. Albert. *Lecture and laboratories four hours.*

A detailed study of the advanced basic skill techniques and coaching methods utilized in Soccer and Lacrosse.

318. Sports Officiating. *Fall and Spring* (2) Mr. Jones.

A survey and critical analysis of the rules and officiating techniques of team and individual events. A minimum of twelve contact hours of supervised intramural officiating is required. *Lectures and laboratories four hours.*

¹ While this course may be taken to fulfill the requirement for Virginia State certification in Driver Education, it may not be counted toward meeting requirements for the A.B. or B.S. degree.

PHYSICAL EDUCATION FOR MEN

321. Foundations of Health Education. *Fall and Spring* (3) Mr. Smith.

An advanced course which develops instructional competencies with special emphasis on the historical as well as the most recent health facts, principles and concepts. A survey is made of the many Virginia State Dept. publications and other resource materials.

400. Senior Seminar. *As required* (3) Staff.

Discussion by the faculty and advanced students of contemporary problems in physical education. Students will write and present papers for critical discussion. Guest lecturers will occasionally present seminars.

408. Organization and Administration of Health and Physical Education Programs. *Spring* (3) Mr. Smith.

This course provides counsel on organizational and administrative policies and procedures for physical education, health, and intramural programs in the public schools.

409. Organization and Administration of Community Recreation Programs, *Fall* (2) Mr. Haynie.

This course is concerned with the administrative and legal aspects of local, state and federal recreation programs.

411. Therapeutic Physical Education. *Fall* (3) Mr. Smith and Mr. Linkenauer. *Prerequisite: Biology 308.*

Basic concepts examined in this course include physical examination procedures with an emphasis on normal and faulty postural conditions. Special attention is given to remedial and adaptive exercises and activities. Physical and corrective therapy techniques and procedures are studied.

412. Advanced Football and Basketball. *Fall or Spring* (2) Mr. Agee.

A detailed study and development of advanced demonstrable skills with special emphasis on coaching techniques is the purpose of this course. *Lecture and laboratories four hours.*

413. Advanced Tennis and Golf. *Fall or Spring* (2) Mr. Agee.

This is a course to further develop the students' competencies and demonstrable skills with emphasis on coaching procedures and tournament management. *Lecture and laboratories four hours.*

414. Advanced Swimming and Rhythmics. *As required* (2) Mr. Haynie.

This course is an intensive study of the coaching methods and teaching techniques plus the acquisition of advanced demonstrable skills in both areas of activity. *Lectures and laboratories four hours.*

415, 416. Student Teaching. *Fall and Spring* (3) Mr. Smith. *Prerequisites: Senior Standing, twenty-four credits in Education and Physical Education.*

This course involves daily observation and teaching in a public school system with weekly conferences, special assignments and reports. *Lectures and laboratory five hours.*

492. Physiology Activity. *Spring* (3) Mr. Linkenauer. *Prerequisite: Biol. 307, 308.*

An in depth study is made of the physiological aspects of exercise, fatigue, coordination, training and growth; functional tests with normal and abnormal subjects; investigations and independent readings.

PHYSICAL EDUCATION FOR MEN

493. Philosophy and Literature in Health, Physical Education and Recreation. As Required (3) Mr. Jones.

Extensive readings, discussions and evaluations of historical and current philosophies and practices are made. Educational implications of problems facing the separate fields are analyzed.

494. Test and Measurements in Health, Physical Education and Recreation. Fall (3) Mr. Jones.

Evaluation techniques are studied with emphasis placed on tests of physical fitness, sports ability, body mechanics, growth, and written health tests. Statistical inference theories are analyzed.

502. Problems and Research in Health, Physical Education and Recreation. As required (3) Mr. Smith. *Prerequisite: Physical Education 494 or the equivalent.*

This course includes the application of various methods and statistics as most commonly used in physical education research. Limited research studies and problems are conducted in the three areas.

503. Seminar in Advanced Techniques in Sports. As Required (3) Staff.

Seminar is devoted to the designing of offensive and defensive plays, types of strategy, instruction of players, and crowd control problems.

506. Administration and Supervision in Physical Education, Health and Recreation. As Required (3) Mr. Smith.

Study is given to administrative management and supervision in all three areas, modification of programs to fit the facilities available, curriculum planning, grading procedures and techniques of instruction.

508. Health Coordination. As Required (3) Staff.

A comprehensive study is made of the factors of school and community activities related to health. Relationships of the service, instructional, protective, and guidance phases in the health program are identified.

Physical Education for Women

ASSOCIATE PROFESSORS WEST (*Chairman of the Department*), ARCHER¹, BROWN, CROWE, ROBY and SHERMAN. ASSISTANT PROFESSORS JACKSON², LAMBERT, and TOMLINSON. COLLEGE PHYSICIAN CILLAY.

The physical education requirement will be waived for students who demonstrate high intermediate skills in four activities, one of which must be swimming. Opportunities to demonstrate these skills are offered in the fall and spring of each academic year. Other students are to complete as many as four semesters in a program of physical activity, depending on the number of skills in which they have earned exemptions. These requirements may be satisfied by electing an activity course offered by the Department of Physical Education, by participating for a season in a varsity sport, or by passing one of the skills tests offered. Before completing four semesters, students are to demonstrate survival swimming skills unless medically excused.

DESCRIPTION OF COURSES

101. Team Sports. *Fall and Spring* (1) Miss Archer, Miss Crowe.

Seasonal activities: hockey, basketball, volleyball, and lacrosse. *Two double periods weekly.*

102. Dance. *Fall and Spring* (1) Miss Roby, and Mrs. Sherman.

Fundamentals of modern dance. *Two double periods.*

‡145, 146. Adapted Activities. *Fall and Spring* (1) Mrs. West.

Upon recommendation of the head of the Department and the College physicians, these courses may be substituted for regular classes.

‡195, 196. Selected Sports and Dance Activities. *Fall and Spring* (1) Mrs. West.

Upon recommendation of the head of the Department, these courses (designed for proficient students) may be substituted for regular classes.

201. Swimming. *Fall and Spring* (1) Miss Crowe, Miss Lambert, Miss Tomlinson, and Mrs. West.

Safety skills, standard swimming strokes, diving, and life saving techniques are offered. *Two double periods.*

202. Individual Sports. *Fall and Spring* (1) Miss Archer, Miss Crowe, Miss Lambert, Miss Tomlinson, and Mrs. West.

Seasonal activities: aerobics, archery, badminton, body mechanics, bowling,³ canoeing, fencing, golf, gymnastics, karate,³ judo,³ techniques of self defense,³ and tennis. *Two double periods.*

ELECTIVE COURSES IN PHYSICAL EDUCATION FOR WOMEN

The following courses are intended to supplement the four semesters of required physical education and may be elected for academic credit. These courses are open to juniors and seniors, and may be elected concurrently with a required class by sophomores. Freshmen may elect these courses in addition to required work with permission of the head of the Department.

¹ Acting Chairman of the Department, 1972-73.

² 1972-73.

³ Fees are charged for these courses.

PHYSICAL EDUCATION FOR WOMEN

302. Waterfront Leadership. Spring (2) Mrs. West and Miss Lambert. *Prerequisite: Senior Life Saving.*

Especially designed for students who wish to do camp and playground work and includes Instructor's courses of the American Red Cross. *Four class and laboratory hours.*

307. Physical Education for the Elementary Classroom Teacher, K-6. Spring (2) Crowe.

Includes methods and materials for teaching Physical Education to elementary school children. Emphasis is on basic understanding of movement patterns which underlie all skills, body awareness, and motor development. Laboratory hours include teaching physical education classes in elementary school. *Four class and laboratory hours.*

ELECTIVE COURSES IN DANCE

These courses supplement the required courses in Physical Education and may be elected for academic credit by men and women with the consent of the instructor. Certain of these courses may be elected to fulfill area and sequence requirements under Area I. Courses may also be taken to form an interdisciplinary concentration in Dance and a related field or fields.

DESCRIPTION OF COURSES

TECHNIQUE. These courses are designed to develop an understanding of movement as an art form and means of expression, beginning with movement fundamentals and continuing through longer and more complex phases with emphasis on performance. Students will be assigned to the course for which they are qualified on the basis of previous background and demonstrated ability. A maximum of 12 credit hours may be earned in Technique.

111, 112. Elementary Modern Dance Technique. Fall and Spring (2,2) Staff. *Four studio hours.*

211, 212. Intermediate Modern Dance Technique. Fall and Spring (2,2) Staff. *Four studio hours.*

311, 312. Advanced Modern Dance Technique. (S) Fall and Spring (2,2) Staff. *Four studio hours.*

220. Introduction to Contemporary Dance. (AS) Fall (2) Mrs. Sherman.

An introduction to the field of Modern Dance with emphasis on the stylistic approach and aesthetic of the artists who have contributed to its development in the twentieth century. *Two class hours.*

305, 306. Dance Composition. (AS) Fall and Spring (2,2) Miss Roby. *Prerequisite: Physical Education 102.*

First Semester: An introduction to the elements, materials and structure of a dance composition. *Four class and laboratory hours.*

Second Semester: Composition of dance etudes; form and style related to other modern arts. *Four class and laboratory hours.*

406. Problems in Dance. (S) Spring (3) Miss Roby and Mrs. Sherman.

Directed study in a special area for the advanced student arranged on an individual basis. The course would include a substantial choreographic project or a research project for a student with special interest and ability in a related field, such as music, theatre, or fine arts.

PHYSICAL EDUCATION FOR WOMEN

WOMEN'S SPORTS

Recreational activities are conducted under the auspices of the Women's Recreation Association, with executive power assigned to a committee of faculty and students. (see page 40.)

Physics

ASSOCIATE PROFESSOR VON BAEYER (*Chairman of the Department*). PROFESSORS CRAWFORD,¹ CROWNFIELD, FUNSTEN, McKNIGHT, SHER, SIEGEL, WELSH² and WINTER. VISITING PROFESSOR FRONSDAL. ADJUNCT PROFESSORS LAWRENCE and ORTEGA. ASSOCIATE PROFESSORS CHAMPION, DOVERSPIKE, ECKHAUSE,³ GROSS,⁴ KANE, KOSSLER, PERDRISAT,⁵ REMLER, and SCHONE. ASSISTANT PROFESSORS BLOOMBERG, CARLSON, DELOS, GARY, PETZINGER, SOEST and YAM. RESEARCH ASSOCIATES COX and SATHE. RESEARCH ENGINEER HUMMEL.

PROGRAM

Traditionally, many physics undergraduates continue in graduate school in pursuit of Ph.D. degrees. However, students who complete a physics concentration also enter a variety of other fields, including among many others archeology, biology, mathematics, law, medicine, environmental sciences, operations research, technical sales, industrial management, engineering, and oceanography. Undergraduate work in physics followed by specialization in other areas has become one of the preferred preparations for many activities that are setting new directions in our changing world because physicists are scientific generalists. The requirements for concentration in physics are deliberately flexible, and are designed to prepare people for either graduate work in physics or for later specialization in other areas.

A minimum of 30 credits, including not more than eight in 100-level courses and not more than three in history and philosophy of physical science, is required for a concentration in physics. Either physics 451-452 or physics 495-496 must be completed, so that all majors engage in independent research during their senior year. Because of the extensive facilities available through the graduate program of the department, the senior projects generally deal with problems at the frontiers of physics. It is only through being actively involved in such pursuits that a student can appreciate the nature of the discipline.

Students who want to become physicists should be prepared in such a way that they can succeed in the best graduate schools. The following statements are advice appropriate to such students:

Physics 101-102 and calculus should be taken during their freshman year.

Physics 201-202 and 251-252 should be included in the sophomore year.

Physics 301-302, 311, 312, 401 and selections from 351-352, 402, 411-412, 475, 481 and 482 should be completed during the junior and senior years.

Suitable mathematics courses should also be included.

Those seeking a less detailed preparation should include 301 but consider taking 206 rather than 401, and 304 rather than 311.

Courses on special topics in physics are offered as Freshman Seminars.

DESCRIPTION OF COURSES

101-102. General Physics. (A) *Fall and Spring* (4,4) Mr. Doverspike, Mr. Gary, and Staff.

This course is designed to develop an understanding of the fundamental concepts of physics. Emphasis is placed upon Newtonian mechanics, electricity and magnetism and modern physics; current research and applications are discussed. Designed for students who are considering concentrating in one of the sciences or mathematics. Concurrent registration in calculus is recommended. Some sections are available as Freshman Seminars. Honors sections are open to students that have a good prepara-

¹ 1972-73.

² On leave of absence 1972-73.

³ On leave of absence second semester 1972-73 and first semester 1973-74.

⁴ On leave of absence 1972-73 and 1973-74.

⁵ On leave of absence 1973-74.

PHYSICS

tion for and a strong interest in physics. *Lectures, discussions, and laboratory six and one-half hours.*

103-104. Elementary Physics. (A) *Fall and Spring* (4,4) Mr. von Baeyer and Staff.

A beginning course of college physics satisfying the area requirements in the field of science. Designed for the non-science concentrator, this course examines how science shapes the world and our vision of the world. Mechanics, light, and electricity, including lasers, electronic instruments, and other devices in the first semester. Introduction to relativity, quantum phenomena, and new ideas about atoms and particles in the second semester. *Lectures, discussions, and laboratory six and one-half hours.*

121. Physics of Music. (A) *Fall and Spring* (3) Mr. Carlson.

Basic concepts of physics, particularly acoustics, needed for an understanding of the properties of sound and music. The course will be in the form of a workshop—students will participate in the performance of experiments which illustrate the ideas. *Lecture and laboratory three hours.*

150. Freshman Seminar.

165. Topics in Physics Relating to Environmental Problems. (S) *Fall* (3). Mr. Champion. *Prerequisite: Physics 101-102 or 103-104.*

An investigation of the physical phenomena associated with current environmental problems; descriptive and quantitative analyses of such problems as energy generation and usage, atmospheric pollution, water pollution and transportation.

175. Development of Physics and Cosmology. (A) *Fall* (3). Mr. Bloomberg.

The evolution of ideas on the structure of the universe with particular attention to the scientific revolutions from the time of the Renaissance to Einstein. Critical study of the role of imagination, observation, and prediction in the development of physical theories. Examination of the interplay between physical theories and contemporary society.

176. Descriptive Astronomy. (A) *Spring* (3) Mr. Bloomberg and Mr. Crownfield.

Descriptive study of the solar system; theories of the origin of the solar system. Star classification; descriptive studies of star clusters and galaxies. Recent developments such as quasars, pulsars, neutrino astronomy and radio astronomy. Current theories of the origin of the universe.

201-202. Intermediate Physics. (S) *Fall and Spring* (3,3) Mr. Delos. *Prerequisite: two semesters each in physics and calculus. Corequisite: Physics 251-252.*

Waves and optics first semester. Relativity and the development of quantum ideas second semester.

203. Modern Physics. (S) *Fall* (4). *Prerequisite: two semesters of physics and one semester of calculus.*

Review of classical physics; relativity, introduction to quantum physics, recent developments in physics. This course is designed for prospective secondary school teachers and may not count for concentration in physics. *Lectures and laboratory six hours.* (Not offered in 1973-74.)

204. Optics and Other Wave Phenomena. (S) *Fall* (4). *Prerequisite: two semesters of physics and one semester of calculus.*

Applications of Snell's law; optical instruments, photography, interference phenomena, lasers. This course is designed for prospective secondary school teachers and may not count for concentration in physics. *Lectures and laboratory six hours.* (Not offered in 1973-74.)

PHYSICS

205. Intermediate Mechanics. (S) *Fall* (4). *Prerequisite:* two semesters of physics and one semester of calculus.

Includes a study of kinematics, dynamics, central forces and planetary motion, linear harmonic oscillator, conservation principles of energy and momentum at an intermediate level. The laboratory which accompanies this course stresses basic principles of mechanics including linear and angular motion and the harmonic oscillator. Meets certification requirements for prospective teachers. Satisfies area sequential course requirements. May not be counted for concentration in physics by students who have had physics 301. *Lectures and laboratory six hours.* (Not offered in 1973-74.)

206. Electricity and Electrical Circuits. (S) *Spring* (4). *Prerequisite:* two semesters of physics and one semester of calculus.

Principles of electricity and magnetism, circuits, electronics and transistors. The laboratory stresses applications of fundamental principles of electricity and electronics. Emphasis is given to the proper use of electrical instruments. Meets certification requirements for prospective teachers. Satisfies area sequential course requirements. May not be counted for concentration in physics by students who have had Physics 401. *Lectures and laboratory six hours.* (Not offered in 1973-74.)

251-252. Intermediate Experimental Physics. *Fall and Spring* (1,1) Mr. Kossler and Staff. *Corequisite:* Physics 201-202.

Experiments in atomic, nuclear and solid state physics, geometrical and physical optics, interference and diffraction phenomena and atomic spectra. *Laboratory three hours.*

301-302. Classical Mechanics. *Fall and Spring* (3,3) Mr. Petzinger. *Prerequisite:* Physics 201-202.

Plane mechanics, mechanics in three dimensions, Lagrangian and Hamiltonian mechanics, special relativity and the mechanics of continuous media.

304. Contemporary Physics. *Spring* (3). Mr. Kane. *Prerequisite:* Physics 201-202 or consent of instructor.

A study of the principles and concepts relevant to problems selected from the fields of solid state, atomic physics, nuclear, elementary particle and plasma physics.

311. Introductory Quantum Physics. *Fall* (3) Mr. Kossler. *Prerequisite:* Physics 201-202.

Atomic, nuclear and solid state physics.

312. Thermodynamics and Introduction to Statistical Mechanics. *Spring* (3) Mr. Remler. *Prerequisite:* Physics 201-202.

The principles of thermodynamics, kinetic theory of gases, and elementary statistical mechanics.

351-352. Experimental Physics. *Fall and Spring* (1,1) Mr. Funsten and Staff.

Introduction to the techniques of experimental research. Circuit theory, electronics, thermometry, vacuum techniques and photon and particle detection. Design and construction of experiments. Evaluation and analysis of experimental results. *Laboratory three hours.*

401-402. Electricity and Magnetism. *Fall and Spring* (3,3) Mr. Welsh. *Prerequisite:* Physics 301.

Development of the theory of electricity and magnetism from fundamental principles. Maxwell's equation, electromagnetic waves and radiation.

PHYSICS

411-412. Quantum Physics. *Fall and Spring* (3,3) Mr. Winter. Prerequisite: Physics 301, 302 and 311.

The quantum theory in its application to atomic, solid state and nuclear physics.

416. Philosophical Problems in Physical Science. *Spring* (3) Mr. McKnight. Prerequisites: Two courses in physics or philosophy.

A study of philosophical problems arising in experiment and theory in classical physics, quantum theory and relativity as to the status of observables, measurements, time and elementary particles. Philosophical implications of contemporary physics. (Same as Philosophy 416.) (Not offered in 1973-74.)

417. History of Physical Science: Its Origins, Sixth Century B.C. through the Renaissance. *Fall* (3) Mr. McKnight.

A study of the Greek and Hellenistic endeavors to explain observed physical phenomena, of Arab Science in the Middle Ages, of the revival of academic science during the rise of the European Universities, and of the Renaissance beginnings of modern physics and astronomy. (Same as History 481.)

418. History of Physical Science: The Classical Period, 1687-1900. *Spring* (3) Mr. McKnight.

A study of the development of the physical sciences after the publication of Newton's Principia. Emphasis will be placed on influences acting on and within the scientific community, on the impact of science on the institutions of society, and on the interrelations between the development of science and that of mathematics and philosophy. (Same as History 482.)

451-452. Physics Research. *Fall and Spring* (1-3, 1-3) Mr. Schone and Staff.

Independent study consisting of both bibliographic and experimental research.

475. Introduction to Mathematical Physics. *Fall* (3).

Vector analysis, complex variables, matrices, series solutions of differential equations, orthogonal functions and partial differential equations. This course does not carry undergraduate credit in Physics. (Not offered in 1973-74.)

481. Topics in Physics. *Fall* (3) Mr. Ortega. Prerequisites: Physics 301 and 312.

An introduction to the basic principles and modern theories of the evolution of stars.

482. Topics in Physics. *Spring* (to be arranged) Staff.

495-496. Honors. *Fall and Spring* (3,3) Staff.

Students admitted to Honors Study in Physics will be enrolled in this course during both semesters of their senior year. Each candidate will be responsible for (a) reading and discussion of a selected list of books in some specific area of the literature of physics; (b) the preparation and presentation by May 1 of an Honors Essay based on his own research or his part of a major research project; (c) satisfactory completion of a comprehensive examination in the field of the student's major interest.

GRADUATE PROGRAM

The department offers the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. For degree requirements, and a full description of graduate courses in physics, write to the department chairman for a Graduate Catalog. Attention is also called to the Graduate Program in Applied Science on p. 168.

Psychology

PROFESSORS WILLIAMS (*Chairman of the Department*), LAMBERT,¹ HARCUM, JOHNSTON, DERKS, CHAMBERS, FRIEDMAN, McKENNA. ASSOCIATE PROFESSORS ROSEN, SHEAN, SHAVER. ASSISTANT PROFESSORS VENTIS, PAYNE, KREUTZER. LECTURERS APPELY, HAMMACK, SCHMIDT, BLOCH. LAB TECHNICIAN DAW.

REQUIREMENTS FOR CONCENTRATION

Degree of Bachelor of Arts: A minimum of 30 credits in the Department is required for concentration in psychology including 301 and 331, although a student whose aim is to prepare for graduate study in psychology may substitute three hours in a related discipline. In special cases it may be wise to work out even more substitutions provided the student has a specific aim of graduate study in a particular area of psychology. In such cases a program for each concentrator will be developed through consultation with members of the psychology faculty. All students preparing for graduate study in psychology, whether or not they are concentrators, are advised to take experimental psychology with laboratory (301, 302,) and psychological statistics and some courses in theory appropriate to their interest.

Degree of Bachelor of Science: Concentration requirements for the B.S. are those listed above for the A.B. but, in addition the student must meet area requirements for the B.S. degree (page 55). The preferred science is Biology.

Normal Program Recommended for Concentration: Psychology 201 and/or 202, 331, 301, 302.

DESCRIPTION OF COURSES

150. Freshman Seminar. *Fall and Spring* (3,3) Staff.

201. Principles of Psychology. (A) *Fall* (3) Mr. Derks, Mr. Friedman.

A study of basic principles of behavior: sensation and perception, conditioning and learning, drives and motivation, response mechanisms and cognitive processes. Two class hours, two laboratory-discussion hours, or three hours lecture.

202. Principles of Psychology. (A) *Spring* (3) Mr. McKenna, Mr. Shaver.

An examination of basic concepts in abnormal, developmental, personality and social psychology: normality and deviation, behavior modification, identification, stages of development, personality traits, motives, attitudes and social perceptions. Two class hours, two laboratory-discussion hours, or three hours lecture.

***211, 212. Introductory Research Seminar.** *Fall and Spring* (1,1) Ms. Rosen, Mr. Derks.

Taken with 201, 202 by selected students interested in extra study and independent scholarship. Enrollment by invitation only. Hours to be arranged.

301. Experimental Psychology: Methods. (A,S) *Fall and Spring* (4,4) Mr. Friedman, Mr. Harcum, and staff. *Prerequisite:* Psychology 331.

An introduction to experimental research with emphasis upon the methods by which psychological data are obtained. *Three class hours, three laboratory hours.*

302. Experimental Psychology: Topics. (A,S) *Fall and Spring* (4,4) Mr. Derks, Mr. Harcum and Mr. Ventis. *Prerequisite:* Psychology 301.

Application of the experimental methods in the various topical areas of psychology, depending on the semester, such topics as behavior modification, child development, cognition, learning, perception, personality, and social psychology will be offered. *Three class hours, three laboratory hours.*

¹ 1972-73

PSYCHOLOGY

303. Industrial and Applied Psychology (A,S) *Spring* (3) Mr. Harcum.

Psychology applied to industrial and military organizations. Uses of psychological tests in selecting and classifying personnel; methods of efficient work; the design of machines and communication systems for human use; industrial training.

310. History of Psychology (A,S) *Fall* (3) Mr. Williams.

From Aristotle to 1940 with special emphasis on the 19th and 20th century. The rise of the major schools of thought: Structuralism, Functionalism, Gestalt psychology, Psychoanalysis and Behaviorism.

331. Statistics, Measurement, and Testing. *Fall and Spring* (3) Mr. Williams, Ms. Rosen.

An introduction to statistics, both descriptive and inferential, including nonparametric tests of significance and simple correlation. Basic principles of psychophysics, psychometric functions and test theory. A brief introduction to hypothesis testing and decision theory. *Two class hours, two laboratory hours.*

ADVANCED COURSES

Prerequisites: 201 and/or 202 or permission of instructor.

403. Systematic Psychology: Theories of Learning and Perception. (A,S) *Spring* (3) Mr. Derks.

A survey of contemporary theory in the field with emphasis on its empirical foundations and future possibilities.

404. Physiological Psychology (A,S) *Fall* (3,4) Ms. Rosen

Physiological basis of behavior with emphasis on mechanisms in perception, learning, emotion and motivation. Students may elect to take laboratory which is designed to provide experience in the techniques of physiological psychology. *Three class hours or three class hours and two laboratory hours.*

405. Abnormal Psychology (A,S) *Fall, Spring* (3) Mr. Payne and Mr. Shean.

A survey of behavior pathology including the neuroses and psychoses and their relationship to current conceptions of normal personality. A smaller class, providing a more intensive examination of these issues is offered in Fall primarily for concentrators.

407. Motivation and Emotion. (A,S) *Spring* (3) Mr. Johnston.

Theories and facts of motivation and emotion and consideration of their differences.

410. Systematic Psychology: Theories of Personality. (A,S) *Fall* (3) Mr. McKenna, Mr. Johnston.

A survey of contemporary theory in the field with emphasis on its empirical foundations and future possibilities.

***412, 413. Advanced General Psychology.** *Fall and Spring* (3,3) Mr. Derks, Mr. McKenna.

An intensive review of the general principles of psychology as taught in 201, 202. *Two class hours, two laboratory hours.*

414. Educational Psychology. (A,S) *Fall* (3) Mr. Ventis.

Individual differences in learning, growth and development in the context of psychological methods and educational aims.

PSYCHOLOGY

416. Social Psychology. (A,S)*Fall* (3) Mr. Shaver.

The effect of social context on the behavior of the individual, with emphasis on prominent theories and research. Topics include social perception, attitude organization and change, social comparison, the social consequences of individual motives, interpersonal influence, and the application of social psychology to contemporary social issues.

417. Developmental Psychology. (A,S)*Fall and Spring* Ms. Kreutzer

A study of human development from birth to maturity, with emphasis on physiological, social, emotional and intellectual processes. Both factual and theoretical approaches are considered. A smaller class, providing a more intensive examination of these issues is offered in Spring primarily for concentrators.

***419. Topics in Psychology.** *Fall and Spring* (TBA) Ms. Rosen, Mr. Bloch, Mr. Chambers, Ms. Kreutzer, Mr. Shean.

Courses concerning special topics not covered in detail in regular course offerings. Topics presented in 1973-74 include daycare for preschool children, computers and psychology, and psychopathology.

***420. Seminar.** *Fall and Spring* (TBA) Mr. Bloch, Ms. Kreutzer, Mr. McKenna, and Mr. Williams.

Special topics of interest to staff and students will be discussed in seminar fashion. Among the seminar topics for 1973-74 are existential-humanistic psychology, man and aggression, psychophysiology.

***421. Research.** *Fall and Spring* (TBA) Ms. Rosen, Ms. Kreutzer and Staff.

Individually supervised empirical investigations in the various areas of psychology. A student must have permission of a faculty supervisor before registering.

***422. Directed Readings in Psychology.** *Fall and Spring.* (TBA) Mr. Chambers, Ms. Kreutzer, and Staff.

Individually supervised readings on special topics. Usually for advanced students. A student must have permission of a faculty supervisor before registering.

431. Quantitative Methods. *Spring* (3) Ms. Rosen and Staff.

An advanced course in statistics and experimental design. *Two class hours, two laboratory hours.* (Same as Psychology 531.)

***495-496. Honors.** *Fall and Spring* (3,3) Mr. Shaver and Staff.

A student admitted to Honors Study is eligible for an award of Honors in Psychology on graduation.

Honors is independent study comprising (a) supervised reading in the field of the student's major interest, primarily in the original literature; (b) the preparation and presentation by May 1 of an Honors Essay based on the student's own research; and (c) satisfactory completion of a comprehensive examination in the field of the student's major interest.

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in psychology, write to the department chairman.

Religion

ASSOCIATE PROFESSORS FINN (*Chairman of the Department*), LIVINGSTON, AND HOLMES.¹ ASSISTANT PROFESSORS VAN HORN AND PETERS.² LECTURER KELLNER.³

REQUIREMENTS FOR CONCENTRATION

A concentration in Religion requires 33 semester credits, at least 27 of which must be taken in the Department of Religion. All concentrators must take Religion 201 (Introduction to Religion); Religion 211 (History of Religion in South Asia) or Religion 212 (History of Religion in East Asia); and Religion 219 (History and Religion of Ancient Israel) or Religion 220 (Christian Origins). Upon approval by the chairman of the Department, six credit hours from cognate courses outside the Department may be used to fulfill concentration requirements.

All concentrators should possess some acquaintance with the variety of approaches to the study of religion, with the various theories of the nature and function of religion, and with the beginnings and general history of at least one of the Western and one of the Asian religious traditions. No specific set of courses must be followed by all concentrators, although a concentration should consist of a series of coherently-related courses. A student may wish to divide his work between courses in the Asian and Western religious traditions. Alternately, he may focus his concentration on either the Western or the Asian religions.

DESCRIPTION OF COURSES

201. Introduction to Religion. *Fall or Spring* (3) Mr. Livingston, Mr. Finn

Religion as a dimension of human experience and culture. The beginnings of religion. Theories of the nature and function of religion. Types of religious phenomena: the sacred or holy; deity; myth, ritual and sacrament; law, faith and mystical insight. Relationship of religion to philosophy, science and art.

211. History of Religion in South Asia. *Fall* (3) Mr. Van Horn.

Introduction to the religious factors in the civilizations of the South Asian subcontinent from the earliest times to the present. The history, literature, and practices of the Indus Valley Civilization, Vedism, Brahmanism, Jainism, Buddhism, Hinduism, Islam, and the current Hindu Renaissance.

212. History of Religion in East Asia. *Spring* (3) Mr. Van Horn.

Introduction to the religious systems of China and Japan, including the literatures, histories, thought patterns, and practices of the major schools of Confucianism, Taoism, Buddhism, and Shintoism.

219. History and Religion of Ancient Israel. *Fall* (3) Mr. Holmes.

A literary and historical study of the major features of Hebrew-Jewish religion in the Hebrew scriptures and intertestamental periods, with special attention to Israel's relation to the cultures and religions of the Ancient Near East.

220. Christian Origins. *Spring* (3) Mr. Finn.

A study of the beginnings of Christianity in the New Testament. Includes analysis of the relation of primitive Christianity to Judaism and Hellenistic culture, the formation of the Gospels, the life and teachings of Jesus, the Pauline writings, and the emergence of post-apostolic Christianity.

¹ Acting Chairman of the Department, 1972-73

² Visiting Assistant Professor, 1972-73.

³ On The Jewish Federation of Newport News Lectureship in Religion.

RELIGION

265. Religious Ethics. Fall (3) Mr. Finn.

The nature of western religious ethics based on an analysis not only of Biblical and other religious literature of the Ancient Near East but also the works of classical and modern authors such as Chrysostom, Augustine, Hillel, Aquinas, Luther, Kierkegaard, Bonhoeffer, Buber, Maritain, Niebuhr, and Heschel. After surveying the history of ethical theory in the West, the course will emphasize contemporary ethical issues.

305. History of Christianity: The Classical Period. Fall (3) Mr. Finn.

A history of Christian thought and institutions from the second through the sixteenth century, with emphasis on the beginnings of Catholic doctrine, the Christological and Trinitarian controversies, Monasticism, Augustine, Early and High Scholasticism, and the beginnings of the Reformation.

306. History of Christianity: The Modern Period. Spring (3) Mr. Livingston.

A study of the influence of secular ideas and events on Christian thought and institutions since the seventeenth century. Special attention is given to such movements as the rise of modern science, Rationalism, Romanticism, Liberalism, Darwinism, Totalitarianism, Existentialism and Ecumenism.

309, 310. History of Religion in America. Fall and Spring (3) Mr. Holmes.

A study of religion in the United States from the age of discovery to the present, with attention not only to the development and beliefs of Christian churches and sects but also to the interaction between religion and American social, intellectual, and cultural history. First semester: colonial period to Civil War. Second semester: 1865 to present.

312. Judaism in America. Spring (3) Mr. Kellner.

A study of the arrival of the Jews in America, the development of the religion in the new world, and the contemporary Jewish experience in America. The course will include a study of leading Jewish thinkers and writers.

315. The Protestant and Catholic Reformations. Fall (3) Mr. Holmes.

A study of the personalities, movements, teachings, and religious consequences of the Protestant and Catholic Reformations of the sixteenth century. Includes Luther, Calvin, Zwingli, the Protestant Radicals, Erasmus, Loyola, the Council of Trent, and the English Reformation.

319. Buddhism in South Asia. Fall (3) Mr. Van Horn.

An intensive study of the Buddhist origins and development in India and the history of the South Asian schools. The classical literature, practices, and beliefs of Buddhism in South Asia, with emphasis on the Theravada school of present Ceylon, Burma, Thailand, etc.

320. Buddhism in East Asia. Spring (3) Mr. Van Horn.

A study of the assimilation of Buddhism in China and Japan. Emphasis upon the literatures, practices, and philosophical statements of Mahayana Buddhism in its various Chinese and Japanese forms.

340. Modern Hinduism. Spring (3) Mr. Van Horn.

A brief survey of the essentials of classical Hindu traditions, followed by an extensive examination of the interactions between these traditions and "Westernization" or "Modernization." Emphasis will be placed upon Ram Mohan Roy, Dayananda, Ramakrishna, Tagore, Gandhi, Radhakrishnan, and to "Universal Hinduism."

RELIGION

425. Contemporary Religious Thought. *Fall* (3) Mr. Livingston.

Central themes in twentieth century religious thought examined through the works of several significant thinkers, such as Buber, Tillich, Marcel, Niebuhr, Teilhard de Chardin, Bultmann, D. T. Suzuki. (Not offered in 1973-74.)

480. Independent Study in Religion. *Fall or Spring* (3) Staff.

A program of extensive reading and writing in a special area of religion for the advanced student. Students accepted for the course will arrange their programs of study in consultation with appropriate members of the Department.

THE SOCIOLOGY PROGRAM

ASSOCIATE PROFESSOR BECKHOUSE (*Chairman of the Department*). PROFESSORS EDMONDS, KERNODLE, RHYNE, and VANFOSSSEN. ASSOCIATE PROFESSORS FAIA, GUENTHER¹, ITO, LIGUORI, and THEMO. ASSISTANT PROFESSORS CHRIST, KERNER, and KREPS.

The Department of Sociology does not have or desire a single integrated purpose or educational philosophy. Various members emphasize the following purposes to different degrees: (1) to help students understand the nature of man in society, with particular emphasis on the issues and complexities of modern society; (2) to enhance student's knowledges and capacities for critical and original thought by involving them in the accumulation of scientific information and the development of research and analytic skills; (3) to provide opportunity for students to have a personal educational experience which enhances their own lives and encourages responsible concern for the quality of society; (4) to contribute to the field of Sociology through research, publication, and involvement in professional associations and activities; (5) to recruit promising students into the profession of Sociology; and, (6) to serve the University and society in general, by making available the professional expertise of sociologists.

The Department believes the above purposes to be compatible with one another, and that Sociology must reflect the diversity found in its principle object of study—namely, modern society.

Concentration in Sociology requires a minimum of thirty semester credits, of which at least twenty-four credits must be in courses numbered 300 or above. Students must take 201, 303, 307, 390, and, after completing 390, at least one course numbered 400 or above (480, 481 do not satisfy this requirement). Many courses offered by the College's program in the foreign universities are accepted toward a Sociology concentration, but not as substitutes for the required courses. The minimum credit hour requirement for a concentration is intended to encourage the student to pursue a wider range of electives in order to develop a broad perspective. It also allows the student to develop a special field of interest in an interdisciplinary manner.

Offices and classrooms on the second floor of the Social Science Building include a statistical laboratory with 24 automatic calculators. Access to facilities of the Computer Center include an I.B.M. 360, Model 50, ancillary equipment, punch cards and program library. The Department of Sociology is a member of the Marshall-Wythe Institute for Research in the Social Sciences. Eastern State Hospital provides opportunity for research and field work in the Sociology of Mental Illness.

Within the Department a wide range and variety of courses are offered covering most of the substantive fields of the discipline as well as its methodology. Whenever possible, the Department attempts to introduce courses affording opportunities for field work application and direct experience. In response to varying needs, interests, and expertise of individual students and staff members, the Department provides means for students to pursue independent research and studies through 490 (Independent Research), 480, 481 (Readings in Sociology), and 495-496 (Honors). Also, the format of 440 (Special Problems in Sociology) allows staff members to present seminar courses, on a one semester basis, which gives them an opportunity to expand a new or specialized interest or research topic. The 440 format allows flexibility, variety, and a means to respond quickly to particular interests expressed by students. It also represents one of the many results of the effective Student-Faculty Liason Committee within the Department.

DESCRIPTION OF COURSES

150. Freshman Seminar. Spring (3) Staff.

¹ On leave of absence, first semester, 1973-74

SOCIOLOGY

201. Principles of Sociology. (A) *Fall and Spring* (3) Staff.

An introduction to the study of human society with emphasis on the basic principles of sociology. Principal concepts developed include society, culture, status and role, socialization and personality, stratification, social organization and institutions, and social change. This course, in providing an integrated set of general principles, is the appropriate introduction to further study in sociology.

211. Social Institutions. (A) *Fall and Spring*. Staff.

An examination of modern institutions with emphasis on continuity, conflict, and change. Focus will be on basic patterns of social structure, principal points of stress and conflict within and between institutions, and major social and ideological forces making for change.

220. Social Problems. (A) *Fall and Spring* (3) Staff.

A survey of social problems such as poverty, urban conditions, race relations, delinquency and crime, and other recurring problems of major concern to contemporary society. The analytic perspective is sociological, stressing concepts drawn from substantive sub-fields of the discipline.

303. Sociological Theory. (AS) *Spring* (3) Mr. Kerner.

Examination of the historical foundations of sociological theory and the establishment of a basis for rational, objective analysis of recent social phenomena. The contributions of 19th century theorists are traced to provide a framework for the study of contemporary concepts in the field.

307. Introduction to Social Statistics. *Fall and Spring* (3) Mr. Faia.

The applications and limitations of statistics are presented as means of providing tools whereby statistical methods may be recognized, interpreted, and applied in sociological research. Included are considerations of averages, measures of dispersion and variance, simple linear correlation and sampling theory. Emphasis on the logic of procedures, not on mathematical derivations. *Three class hours, two laboratory hours.*

313. Social Stratification. (AS) *Fall* (3) Ms. Themo.

Examination of the principal structural units of society. Central focus is on the concepts of differentiation, hierarchy, class, caste, and economic, prestige, and power orders. Comparative analysis, historical and cross-cultural, is followed by consideration of class structure in the United States.

319. Population Problems. (AS) *Spring* (3) Mr. Faia.

A consideration of the manner in which populations grow and decline and the effects of such change on society. Emphasis is on theories of population growth, distribution, births, deaths, internal and international migration, bio-social and sociological composition. Included are discussions of the sources of data and techniques and methods of analysis, as well as contemporary population problems.

322. Criminology. (AS) *Fall* (3) Staff.

An analysis of trends in criminal behavior; emphasis is on theory and research in causation and treatment. Attention is given to criminal careers, to police and correctional systems as control agencies, and to criminal law as an instrument of moral condemnation, retribution and deterrence.

326. Racial and Cultural Minorities. (AS) *Fall* (3) Mr. Liguori.

Distinctions of race and ethnicity in American society and their impact on inter-group relationships and public policy. Attention is given to the nature of racialist ide-

SOCIOLOGY

ology, to prejudice and discrimination, and to an analysis of "the culture of poverty". Considered also are less frequently examined and non-problem minority groups.

328. Black-White Relationships in American Society. (AS) Spring (3) Mr. Ito.

Demographic and institutional variations among black and white Americans examined in a context of ideological as well as structural change; consequences of racial prejudice and discrimination for black personality and social structure. The Negro heritage in its relationship to the development of black consciousness is also analyzed.

330. Sociology of Mental Illness. (AS) Fall (3) Mr. Kernodle. *Prerequisite: Sociology 201 or consent of instructor. Limited enrollment.*

"A seminar on the sociological aspects of mental illness and mental health. The social and cultural sources of mental disorders, definitions, types, distribution within the social structure and sociological factors in the treatment of mental illness will be scrutinized. Consideration of the mental hospital as a social system."

331. The Community and Social Psychiatry. (AS) Spring (3) Mr. Kernodle. *Prerequisite: Sociology 201 and Sociology 330 or consent of the instructor.*

"A study of the structure and relationships among various social organizations and professions in the community which are involved in the development and delivery of psychiatric services. Community psychiatry as a social movement is explored and related to changing social values and definitions of illness and health."

332. Marriage and the Family. (AS) Fall (3) Mr. Kernodle.

Analysis of the social relationships among people in courtship, marriage and family situations. Interrelations of family institutions and other parts of social structures. Intensive study of American family structure and relevant examples drawn from other cultures.

334. Sociology of Religion. (AS) Spring (3) Ms. Themo.

Conceptions of the supernatural in examination of religious beliefs and practices; development of religious groups and institutions; relation of religion to social structure and social change.

335. Sociology of Education. (AS) Fall (3) Mr. Ito.

The school as a social institution, as a bureaucratic organization, and in a context of change. Attention is given to the differential impact of social class, family, race, and residence on educational opportunity. Current problems in higher education are considered.

346. Maritime Sociology. (AS) Spring (3) Mr. Liguori.

"Description and analysis of the life styles of people oriented primarily to maritime occupations and environments. Attention is directed to inshore vs. distant-water ship-board life styles, the study of specific maritime work organizations distinguished on the basis of technology and research on 'isolated' fishing communities. The reading includes relevant fiction as well as the sociological literature in the field."

349. Human Geography. (AS) Fall (3) Mr. Rhyne.

A study of the adjustment of human societies to their physical environment. Emphasis is on the spatial distribution of human population, cultural forms, and social types. Examination of social and cultural bases of environmental pollution and its control.

350. The Sociology of Small Groups. (AS) Spring (3) Mr. Beckhouse. *Prerequisite: Sociology 201, or Psychology 201, or consent of instructor.*

SOCIOLOGY

Introduction to theory and research of small group analysis. The structural properties and processes of small groups, theoretical perspectives used to explain social interaction within the small group context, interpersonal influence, role differentiation, behavioral tactics, and social control within groups are examined.

390. Social Research. Spring (3) Mr. Beckhouse. *Prerequisites: Sociology 201 and 307.*

"Examination of the major issues and strategies involved in conducting sociological inquiry. Special attention is given to such topics as causal inference, sampling frames, structured and unstructured observation, data analysis, and research design and implementation."

404. History of Social Thought. (S) Spring (3) Mr. Rhyne.

A survey of the major strands in social thought in the West and the influence of these on the founding and development of sociology as a separate discipline.

406. Socialization and Society. (S) Fall (3) Mr. Beckhouse.

Analysis of theoretical and empirical issues relevant to socialization. Emphasis is upon the generic process by which individuals become members of society, with special consideration on the impact of socio-economic class, race, and family structure on socialization. Specific examination of socialization beyond childhood is also offered.

408. Intermediate Social Statistics. Spring (3) Mr. Ito. *Prerequisite: Soc. 307 or equivalent. Sociology 390 recommended.*

A brief review of the logic underlying inductive statistics and tests of significance of single variables followed by tests of significance involving two or more variables. Parametric and non-parametric measures of relationship between two or more variables will also be considered. (Not offered in 1973-74)

410. Deviant Behavior. (S) Spring (3) Mr. Guenther.

Analysis of behavior which violates institutionalized expectations, yet is not necessarily "pathological" or illegal: college cheating, homosexuality, nudism, drug and alcohol abuse, and suicide, for example. Focus is on the internalization of norms and values, sanctioning and stigmatization, and the development of deviant careers.

411. The Future of Modern Society. (S) Fall (3) Mr. Vanfossen.

"An analysis of the major strains and changes in modern society and the possible alternative forms human society might take. Particular attention is given to 'the cultural revolution;' alienation; ideology; authority and dissent; and personal and social freedom. The basic concern is how both social structure and socialization might be organized to produce a better society."

413. Urban Sociology. (S) Spring (3) Mr. Kreps.

The emergence and structure of the city in historical and cross cultural perspective, with special attention to the phenomena of urbanization and urbanism in the United States. Consideration of urban structure from both ecological and social perspectives; analysis of change in urban structure; selected problems associated with urban growth and life.

416. Social Movements. (S) Spring (3) Mr. Rhyne.

A study of the social and cultural characteristics of contemporary social movements such as liberalism, democracy, socialism, communism, fascism. A critical evaluation is made of the philosophies, social foundations, and organizations of important movements. Emphasis on the interplay of these three factors.

SOCIOLOGY

422. The Sociology of Knowledge. (S) *Fall* (3) Mr. Christ.

"The course consists of an extensive inquiry into the literature of the sociology of knowledge—a tradition emphasizing the relationship between mental productions and the social circumstances under which they emerge. Emphasis upon the relationships between social structure and general cognitive systems, political ideologies, social norms, and scientific ideas."

431. Industrial Sociology. (S) *Spring* (3) Mr. Kerner. *Prerequisite:* nine hours of sociology courses including Soc. 201.

A sociological and social psychological assessment of complex industrial organizations including a survey of the development of organizational analysis. Individual, group, and system levels of analysis are presented, culminating with a consideration of organizational adaptation for effective utilization of human resources.

433. The Structure of Power. (S) *Fall* (3) Mr. Rhyne.

The organization of power and authority within the social order. Comparison drawn between different power structures in terms of differences in the social order. An investigation of the writings of some of the major theorists (some combination from Marx, Mosca, Lenin, Pareto, Michels, or Sorel and contemporary authors) on social and political power is undertaken.

438. Social Psychology of Human Groups. (S) *Fall* (3) Mr. Edmonds.

Examination of the social sources of individual experience and behavior with particular emphasis upon relations within and between human groups. Among the topics considered are human learning, human thought and language, personality development, socialization, social persuasion, crowd behavior, fads, fashions, and social movements.

440. Special Problems in Sociology. *Fall or Spring* (3) For sociology majors only and upon consent of the Head of the Department.

442. The Sociology of Developing Countries. (S) *Spring* (3) Ms. Themo.

Examination of processes inherent in cultural, political, and economic development within both emergent and established "under-developed" nations. Focus is on institutional structures and attitude systems supporting modernization of traditional social orders. Main substantive materials are drawn from contemporary Latin America.

480-481. Readings in Sociology. *Fall and Spring.* (1-3) Staff.

"Independent readings directed toward conceptual topics and substantive areas in Sociology. The student will read materials in his own area of interest in consultation with an appropriate staff member. Readings will not duplicate areas covered in courses offered in the curriculum. Prior to registration, students must obtain written permission from both the department chairman and the instructor who will direct the readings. The number of credit hours will be arranged prior to registration and cannot be changed after the "add-drop" period." (480-481 will not satisfy the 400-level course requirement for concentrators.)

490. Independent Research. *Fall and Spring.* (3) Staff. *Prerequisite:* Sociology 390.

"This course is designed to permit the Sociology concentrator to engage in independent research after completing Sociology 390 (Social Research). Working closely with a staff member as an advisor, each student will be expected to prepare a paper in the form of a senior thesis.

HONORS STUDY

495-496. Honors. *Fall and Spring.* (3,3) Staff.

"Sociology Honors candidates enroll for both semesters of their senior year. Requirements include: oral defense of 'Honors Proposal' at the end of the first semester; preparation, under the supervision of a thesis advisor, and presentation by May 1st of a completed honors essay or project; and satisfactory performance in a comprehensive oral examination which focuses on the honors thesis or project."

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in sociology, write to the department chairman for a Graduate Catalog.

THEATRE AND SPEECH

ASSOCIATE PROFESSOR SHERMAN (*Chairman of the Department*). PROFESSORS HAAK and SCAMMON.¹ ASSOCIATE PROFESSORS BLEDSOE and CATRON. ASSISTANT PROFESSORS BROWN, MICKEN, and PENCE. INSTRUCTORS THOMAS² and WINEBRENNER.

By virtue of his decision to become a Theatre Concentrator the student accepts the requirements demanded by his art—self-discipline, cooperation, dedication, desire for constant improvement toward excellence, curiosity—and the responsibilities to his art which co-exist with those already important ones demanded of him as a college student. The concentrator realizes that he must become acquainted with all facets of theatrical practice and proficient in many. As a Theatre Concentrator the student has special obligations to his theatrical organization—The William and Mary Theatre—the stage counterpoint of his academic career, carefully designed to give him full opportunities to develop his craft and art.

After his graduation he will want to be able to lead others; therefore, he should now seek opportunities to train himself as a leader, under the helpful wing of The Theatre and its Staff. Many opportunities exist for the student's growth in leadership capabilities: in addition to the four major productions produced by The William and Mary Theatre, a student may also participate in Directors' Workshop, plays directed by students in the class in Direction; and in Premiere Theatre, plays written, produced, directed and acted by students.

His future life in the theatre is greatly dependent upon his own utilization now of the opportunities provided by the activities in The Department of Theatre and Speech. His training at William and Mary provides him excellent preparation to work in theatre, to teach, or to continue studies on a graduate level.

REQUIREMENTS FOR CONCENTRATORS IN THEATRE

A concentration in Theatre requires 30 credits in theatre courses, 28 hours of which must be according to certain areas which insure a balanced and representative program. Students considering a Theatre concentration are advised to take Theatre 204 and/or 205 early in their academic careers, preferably during the Freshman year.

A specific Theatre program must contain the following minimal concentration requirements:

- I. Two introductory survey courses (6 credit hours) to survey the art and craft of Theatre (i.e., Theatre 204 and 205);
- II. Two courses in Theatre Arts (6 credit hours) chosen from the following selection: Theatre 301 or 302, 317 or 318, 407, 319 or 320;
- III. Two courses in Technical Theatre (6 credit hours) chosen from the following selection: Theatre 305, 309, 313, 321;
- IV. Three courses in Dramatic Literature courses (9 credits) chosen from the following selection: Theatre 315, 316, 403, 404, 410.
- V. During either or both semesters of their Senior year, concentrators are to enroll in Theatre 411, Independent Studies, for a minimum of 1 credit hour and a maximum of 3 credit hours per semester.

THEATRE

204. Introduction to Theatre Arts. (AS) *Fall or Spring* (3) Mr. Catron, Mr. Scammon.

A survey of the arts of the theatre, plus study of dramatic literature of major periods of theatrical history. Theories and techniques of play-writing, acting and direct-

¹ Chairman of the Department, 1972-73.

² 1972-73

THEATRE AND SPEECH

ing will be studied then put into actual practice during laboratory sessions. *Two class hours, two laboratory hours.*

205. Introduction to Technical Production. (AS) *Fall or Spring* (3) Mr. Haak, Mr. Sherman.

Study and practice of technical components of the theatre: costuming, lighting, sound, makeup, properties, stage rigging and scene design, construction, and painting. *Two class hours, two laboratory hours.*

206. Makeup. *Spring* (2) Mr. Bledsoe.

Study and practice of makeup in relation to light, shade and color; character analysis study, showing the effects of heredity, temperament, environment, health and age. Students in this course assist in William and Mary Theatre productions. *Six studio hours.* (Not offered 1973-74.)

301, 302. Acting. (S) *Fall and Spring* (3,3) Mr. Scammon.

Critical analysis and appreciation of acting developed by lectures, reading and discussion, and presentation of individual and group scenes. (Not offered 1973-1974.)

303. Scene Painting. *Fall* (2) Mr. Bledsoe.

A study of the various techniques of scene painting.

305, 306. Stagecraft. *Fall and Spring* (3,3) Mr. Haak.

Study and practice in technical problems; working drawings, construction, scene painting, rigging, and handling of scenery, properties, backstage organization, and sound effects. Students in this course act as technicians for William and Mary Theatre productions. *Workshop six hours.*

309-310. Design for the Theatre. *Fall and Spring* (3,3) Mr. Bledsoe.

Basic analysis of the visual elements of theatrical production. Lectures and demonstrations on significant historical periods. Emphasis is placed on water-color sketching, scene painting, drafting. Students act as technicians for William and Mary Theatre productions. *Studio six hours.* (Not offered 1973-1974.)

312. History and Appreciation of the Motion Picture. *Fall or Spring* (2) Mr. Haak.

Survey of the historical development of the film in Europe and America, and of organization, management, and mechanical process in production. In laboratory, historic and current films illustrating lecture material are shown. *Two class hours; two laboratory hours.*

313. Introduction to Stage Lighting. *Fall* (3) Mr. Sherman.

Methods and materials of stage lighting, with emphasis on the study of the functions and qualities of light, instruments, control equipment, and procedure. Students will assist with William and Mary Theatre productions. *Two class hours; two laboratory hours.*

314. Stage Lighting Design. *Spring* (3) Mr. Sherman. *Prerequisite: Theatre 313 or consent of instructor.*

Theory and technique of stage lighting design, with emphasis on artistic considerations and its value to the director as an interpretative tool. Students will assist with William and Mary Theatre productions. *Two class hours; two laboratory hours.*

315. History of the Classical and Medieval Theatre. (S) *Fall* (3) Mr. Scammon.

Study of the forms of the drama, development of the theatre and techniques of the stage of the Greek, Roman and Medieval Ages.

THEATRE AND SPEECH

316. History of the Renaissance, Eighteenth and Nineteenth Century Theatre. (S) Spring (3) Mr. Scammon.

Study of the forms of the drama, development of the theatre and techniques of the stage in the Renaissance, Eighteenth and Nineteenth centuries.

317-318. Playwriting. (S) *Fall and Spring* (3,3) Mr. Catron.

For the student with interest and ability in creative writing, this course serves as an introduction to writing stage plays. During the year students are to write a number of plays which are discussed informally in class. Discussions, lectures, and readings help the student find a dramaturgical form to express his ideas. Worthy scripts often receive a Lab Theatre production.

319, 320. Theatre Administration. *Fall and Spring* (3,3) Mr. Sherman.

The principles of management applied to the fields of theatre operations, production and performance, with emphasis given to promotion, box-office procedures and house management. (Not offered 1973-1974.)

321-322. Costume Design for the Theatre. *Fall and Spring* (3,3) Mr. Bledsoe.

Lectures of historic period costume. Practice in sketching, construction, form, color and detail for stage costumes. Students serve as costumers for William and Mary productions. Advanced students may serve as designers for Theatre productions.

***Theatre 330. American Music Theatre.** *Spring* (3) Mr. Paledes, Mr. Scammon.

A study of American operetta and musical comedy from the colonial period to the present. Representative works from various periods will be studied with respect to their musical and dramatic styles. Students will be required to prepare excerpts for class performance and analysis. Same as Music 318.

403. Seminar in Contemporary Drama. (S) *Fall* (3) Mr. Bledsoe.

Analysis of late nineteenth and twentieth century drama with special emphasis on forms and styles of the "modernism" movement. *Lectures, discussion and research.*

404. Seminar in the Modern Theatre since 1950. (S) *Spring* (3) Mr. Bledsoe.

A study of the latest trends and movements in Theatre. The course places focus upon new concepts of theatre, new styles of theatrical organizations and new playwrights. (Not offered 1973-1974.)

***407-408. Direction.** (S) *Fall and Spring* (3,3) Mr. Scammon.

Study and practice in the principles of choosing the play, casting, rehearsals, and performance. Special emphasis on direction of one-act plays. *Two class hours; six laboratory hours.*

410. History of the American Theatre. (S) *Spring* (3) Mr. Catron.

The history of the theatre in America from its beginnings in Williamsburg up to more recent times. Readings of plays and texts are designed to present the more significant developments in American theatre history. (Not offered 1973-1974.)

***411. Independent Studies in Theatre.** *Fall or Spring* Staff.

Independent study on a special problem for the advanced student, arranged on an individual basis with credit according to work done.

417-418. Advanced Playwriting. (S) *Fall and Spring* (3,3) Mr. Catron.

Study in depth of form and content in drama, accomplished by readings of dramatic theories as well as of original playscripts, plus the writing of plays. *Prerequisite: Theatre 317-318, at least one additional Theatre course, and permission of instructor.*

SPEECH

201. Public Speaking. *Fall or Spring* (3) Mr. Micken, Mr. Winebrenner.

Understanding and application of the principles of public speaking. Analysis of speeches based on organization, content, and delivery.

203. Voice and Diction. *Fall or Spring* (3) Mrs. Brown.

Study of processes of oral speech, including development of speech in young children, physics of sound, physiological, psychological and social bases of speech and phonetics. Training in voice production, articulation, pronunciation and quality.

303. Oral Interpretation. *Fall* (3) Mrs. Brown.

Study of basic principles in techniques of oral interpretation. Use of body, voice, analysis of materials, reading and evaluations of prose. *Three class hours, one hour practicum.*

304. Advanced Oral Interpretation. *Spring* (3) Mrs. Brown. *Prerequisite: Speech 303 or consent of the instructor.*

Study of and training in techniques of oral interpretation of poetry. *Three class hours, one hour practicum.*

301. Foundations of Broadcasting. *Fall* (3) Mr. Pence.

An examination of the history and evolution of broadcasting as it exists in the United States, with consideration of business, regulatory and social aspects as they relate to the contemporary system.

302. Beginning Broadcast Production. *Spring* (3) Mr. Pence.

Fundamentals of radio program production. Emphasis on production and methods and problems at the level of the local station. Laboratory work involves the application of program and production theory. *Six hours studio.*

308. Speech Composition and Briefing. *Spring* (3) Mr. Micken.

Study of the special techniques of speech construction as applied to advanced forms of public address, emphasizing structure, arrangement, and style. Special attention given to the application of the principles to persuasion and to argumentation. (Not offered 1973-1974.)

309. Argumentation and Debate. *Fall* (3) Mr. Micken.

Training in the techniques and practices of argumentative speaking, study and analysis of debate propositions, preparation of the brief, research and selection of evidence, and practice in rebuttal and refutation. Lectures and class debating.

310. Principles of Group Discussion. *Spring* (3) Mr. Micken.

Study of logical and psychological foundations of discussion as a method of dealing with public questions, considering problems of adjustment, communication and collaborative action in small groups. Emphasis on principles, types and methods of discussion. Lectures and practice participation. (Alternates with Speech 308.)

401. Studio Operations: Directing for Television. *Fall* (3) Mr. Pence. *Prerequisite: Speech 302 or consent of the instructor.*

A study of theory and methods of television production and direction. Detailed examination of cameras, lights, audio, graphics, design and responsibilities of studio and control room personnel. *Six hours studio.*

THEATRE AND SPEECH

402. Television Writing and Production. Spring (3) Mr. Pence. *Prerequisite:* Speech 401.

A study of the theory and methods of writing, producing and directing for television with emphasis on limitations and responsibilities of the medium. Opportunity to supervise all aspects of television production. *Six hours studio.*



Graduate Program in Applied Science

Applied Science at the College of William and Mary is an inter-disciplinary graduate program which leads to a M.S. degree. Courses will be taught on the main campus and at the Virginia Associated Research Campus (VARC) in Newport News on a rotating basis so that students can methodically pursue a degree by taking most courses at the Research Campus.

The program is offered cooperatively by participating faculty from the departments of chemistry, mathematics, and physics and is intended for students who wish an education with a focus which differs from that of traditional departments. This difference may arise from a course sequence which is interdisciplinary or one which is more specialized than usual within a department. The Applied Science program is organized as follows:

- I. Applied Mathematics and Computer Science Area
 - A. Applied Mathematics Division
 - 1. Probability and Statistics Specialization
 - 2. Partial Differential Equations Specialization
 - 3. Ordinary Differential Equations Specialization
 - B. Computer Science Division
 - 1. Computer Languages and Programming Systems Specialization
 - 2. Numerical Analysis Specialization
 - 3. Mathematical Programming and Simulation Specialization
- II. Chemical Physics Area
 - A. Atmospheric and Plasma Science Division
 - 1. Atmospheric Science Specialization
 - 2. Ion-Molecule Reaction Specialization
 - 3. Plasma Specialization
 - B. Liquids and Solids Division
 - 1. Polymers Specialization
 - 2. Crystalline Materials Preparation Specialization
 - 3. Physics of Electronic Devices Specialization

School of Business Administration

PROFESSORS QUITMEYER (*Dean of the School of Business Administration*), MCCORMICK,¹ PARK, QUINN, SANCETTA, and TRAYWICK (*Director of the Bureau of Business Research*), ASSOCIATE PROFESSORS COLE, DAFASHY, JONES, O'CONNELL, PEARSON, SMITH (*Associate Dean for Undergraduate Studies, School of Business Administration*), STANLEY (*Associate Dean for Graduate Studies, School of Business Administration*), VARGO,¹ WARREN, and WOODWARD. ASSISTANT PROFESSORS BAXLEY, BLOOD, CHASTAIN, ELEGERS,² LIDDELL, MADDOCKS, MESSMER, TARLETON, and WILLIAMS. LECTURERS GLEYSTEN, MARSH,¹ and MCNAIRY¹.

The School of Business Administration offers both an undergraduate program and a graduate program in Business Administration.

The undergraduate degree of Bachelor of Business Administration (B.B.A.) carries a choice among three subprograms, two in Accounting (one with a Certified Public Accountant [CPA] orientation and one without) and one in Management.

The graduate program leads to the degree of Master of Business Administration (M.B.A.).

The Bureau of Business Research of the School renders a service to the Virginia business community with its monthly publication, the Virginia Business Index Report, which reflects current business and economic activity in the Commonwealth. The Bureau also publishes monthly the Williamsburg Business Index Report. In addition, the Bureau from time to time publishes special research studies.

Further service to the business community is provided by the School through sponsorship of business conferences and projects.

Established in 1970, the School of Business Administration Sponsors, Inc., a private group with a board of directors of nineteen executives, lends advice and support to the School.

CURRICULUM REQUIREMENTS

Bachelor of Business Administration Degree

Prior to the student's junior year, only at which time, or later, admission to the School and its B.B.A. degree program may occur, the student must follow and complete the area requirements in Arts and Sciences consisting of a minimum of two semester courses in each of the three Arts and Sciences areas and two additional semester courses outside of Area II so that at least four semester courses outside of Area II form a logical sequence of introductory and advanced courses or a logical combination of courses on an interdisciplinary topic. Also, the student must complete whatever requirements in Arts and Sciences prevail in regard to English, Foreign Language, and Physical Education. However, the student should take, during the sophomore year, Business 201-202 (Principles of Accounting). No other Business Administration course may be taken before the student's junior year.

Prerequisites to admission to the School are six semester credits in mathematics and six semester credits in economics which also satisfy the area requirements in these subjects.

Before being graduated with the B.B.A. degree, the student must have completed a minimum of sixty semester credits in Arts and Sciences academic subjects.

Application for admission to the School of Business Administration's B.B.A. degree program normally is filed by the student during the second semester of the sophomore year through the Office of the Dean of Students. Such application is then acted upon by the School's Undergraduate Committee on Admissions, whereupon the student is notified directly, with the Office of the Dean of Students apprised of admission ac-

¹ 1972-73

² On leave of absence, 1972-73.

SCHOOL OF BUSINESS ADMINISTRATION

tions taken. A student who has achieved junior standing, has completed all Arts and Sciences proficiency and area requirements, and has met the School of Business Administration's prerequisite requirements, as above, will be fully admitted to the undergraduate program. A student who has deficiencies in any of the above, but whose class standing is such that a Business subprogram should be selected, will be considered for admission on provisional status. Provisionally admitted students will be required to give priority to completion of any deficiencies.

The following requirements for completion of the B.B.A. degree, subject to the aforementioned curriculum requirements, will hold for each of the School's three subprograms. A 1.0 quality point average is required, counting all courses for which quality point grades are given, and a 1.0 quality point average in all Business Administration courses taken in which quality point grades are given.

Upon admission to the School of Business Administration all candidates for the B.B.A. degree shall come under the jurisdiction of the School's administration, including its Undergraduate Committee on Academic Status and Undergraduate Committee on Degrees, in all matters appropriately pertaining thereto.

In addition to the general requirement of a minimum of sixty semester credits in Arts and Sciences academic subjects, the Business Administration course requirements common to all three subprograms are as follows:

Subject	Semester Credits
Business 201-202 (Principles of Accounting)	6
Business 311 (Principles of Marketing)	3
Business 316 (Behavioral Science and the Business Organization)	3
Business 323 (Financial Management)	3
Business 330 (Production Management)	3
Business 331 (Business Statistics)	3
Business 341 (Business Law I)	3
Business 416 (Business Policy)	3
Total.	27

For the subprogram in Accounting with a Certified Public Accountant (C.P.A.) orientation the remaining requirements for the B.B.A. degree are:

Subject	Semester Credits
Business 301-302 (Intermediate Accounting)	6
Business 303 (Cost Accounting)	3
Business 318 (Quantitative Analysis for Business Decisions)	3
Business 342 (Business Law II)	3
Business 401 (Advanced Accounting)	3
Business 404 (Auditing)	3
Business 405 (Federal Taxation)	3
Business 407 (Seminar in Accounting)	3
Business 409 (Accounting Systems and Data Processing)	3
Elective.	3
Total.	33

For the subprogram in Accounting not C.P.A. oriented the remaining requirements for the B.B.A. degree are:

SCHOOL OF BUSINESS ADMINISTRATION

Subject	Semester Credits
Business 301-302 (Intermediate Accounting)	6
Business 303 (Cost Accounting)	3
Business 401 (Advanced Accounting)	3
Business 405 (Federal Taxation)	3
Business 407 (Seminar in Accounting)	3
Business 409 (Accounting Systems and Data Processing)	3
Electives	12
Total	33

For the subprogram in Management the remaining requirements for the B.B.A. degree are:

Subject	Semester Credits
Business 315 (Industrial Relations)	3
Business 318 (Quantitative Analysis for Business Decisions)	3
Business 327 (Principles of Management)	3
Business 334 (Decision Theory)	3
Business elective	3
Electives	18
Total	33

ELECTIVE COURSES FOR NON-BUSINESS STUDENTS

A number of undergraduate students from other disciplines choose School of Business Administration courses as electives. The School of Business Administration welcomes such students, and in the interest of providing some breadth of subject matter particularly suggests the following courses, not necessarily in sequence. (Economics 201, 202 should precede taking Business 311 and Business 327).

- Business 311 (Principles of Marketing)
- Business 316 (Behavioral Science and the Business Organization)
- Business 327 (Principles of Management)
- Business 341 (Business Law I)
- Business 410 (Survey of Accounting)

It should be noted that no Business courses may be taken before the junior year, except Business 201-202 (Principles of Accounting), which may be taken in the sophomore year or later.

DESCRIPTION OF COURSES: ACCOUNTING

(Junior or higher standing is required before admission to any of the following courses, except that sophomore or higher standing is required for admission to Business 201-202.)

201-202. Principles of Accounting. Fall and Spring (3,3) Staff.

The managerial uses of accounting reports and preparation of financial statements for external reporting. Included are performance and cost measurements, planning operations, and balance sheet, funds flow, and income statements.

SCHOOL OF BUSINESS ADMINISTRATION

301-302. Intermediate Accounting. *Fall and Spring* (3,3) Mr. Quinn. *Prerequisites:* Bus. 201-202.

An analysis of balance sheets and profit and loss statements, together with the theory of valuation underlying the various accounts used in these statements.

303. Cost Accounting. *Fall* (3) Mr. Elgers. *Prerequisites:* Bus. 201-202.

The fundamentals of job order, process, and standard cost accounting and cost and profit analyses for decision-making purposes. Problems are used.

401. Advanced Accounting. *Fall* (3) Mr. Smith. *Prerequisites:* Bus. 301-302, or permission of the instructor.

A study of consolidated statements, partnership accounting, accounting for special sales arrangements, fiduciary accounting, and fund accounting.

404. Auditing. *Fall* (3) Mr. Elgers. *Prerequisites:* Bus. 301-302.

Auditing procedures through the application of auditing principles; standards and ethics; audit reports.

405. Federal Taxation. *Spring* (3) Mr. Smith.

An analysis of federal income tax laws. Development of conceptual awareness of federal income tax structure and tax planning, and gaining ability to determine solutions to tax difficulties confronting organizations.

407. Seminar in Accounting. *Spring* (3) Mr. Chastain. *Prerequisites:* Bus. 301-32.

Selected topics based upon controversial issues in accounting theory and practice.

409. Accounting Systems and Data Processing. *Fall* (3) Mr. Williams. *Prerequisites:* Bus. 301-302.

The development, organization, design, analysis, and improvement of manual and automated business information systems.

410. Survey of Accounting. *Spring* (3) Mr. Dafashy.

A survey of the general field of accounting. Open to students of junior or higher standing not admitted to the School of Business Administration and not having taken Bus. 201 or 202.

DESCRIPTION OF COURSES: MANAGEMENT

{Junior or higher standing is required before admission to any of the following courses.}

311. Principles of Marketing. *Fall and Spring* (3) Mr. Baxley and Mr. Messmer. *Prerequisites:* Econ. 101-102, or permission of the instructor.

A study of the role of marketing in business and the economy. Emphasis is on the examination of functions, institutions, and policies.

312. Marketing Problems. *Spring* (3) Mr. Baxley and Mr. Messmer. *Prerequisites:* Econ. 101-102, or permission of the instructor.

An examination of marketing problems encountered at all levels of distribution. Cases are used to emphasize analysis and decision-making.

315. Industrial Relations. *Fall and Spring* (3) Mr. Cole and Mr. Liddell.

A course to provide understanding of the principles, policies, and practices used to develop a sound industrial relations program. Topics included are job analysis, the employment process, employee development, wage and salary administration, labor relations, and union negotiation.

SCHOOL OF BUSINESS ADMINISTRATION

316. Behavioral Science and the Business Organization. *Fall and Spring* (3) Mr. Cole.

A study of human behavior, development, and motivation in the business organization. Attention is given to behavioral science research in administration.

318. Quantitative Analysis for Business Decisions. *Fall and Spring* (3) Mr. Blood, Mr. Dafashy, and Mr. Elgers. *Prerequisites:* Six credits in mathematics, or permission of the instructor.

A course which integrates quantitative decision methods and the team approach to research problems of interest to management. Attention is given to probability theory, linear programming, and other quantitative approaches used in the analysis of business problems.

320. Advertising. *Spring* (3) Mr. Gleysteen. *Prerequisites:* Econ. 101-102, or permission of the instructor.

A study of the relationship of demand stimulation to business management. Analysis of cases will emphasize the management of advertising campaigns, expenditures, and the integration of advertising efforts as part of the total marketing concept.

323. Financial Management. *Fall and Spring* (3) Mr. O'Connell and Mr. Pearson. *Prerequisites:* Bus. 201-202.

An introductory course covering current and long-term financing of the firm, capital budgeting, dividend policies, and business expansion.

327. Principles of Management. *Fall and Spring* (3) Mr. Maddocks. *Prerequisites:* Econ. 101-102, or permission of the instructor.

An introduction to the principles of management and their application to business. Emphasis is given to the development of a philosophy of management.

328. Management Use of Accounting Data. *Fall and Spring* (3) Mr. Park. *Prerequisites:* Bus. 201-202 and 327, or taking Bus. 327 concurrently. (For Management subprogram students only.)

A course to enable more comprehensive analysis of decisions through accounting information. Emphasis is upon budgeting, cost concepts and applications.

329. Management of Small Business. *Fall* (3) Staff.

A study of the special problems, analysis, and decision-making involved in the management of small business.

330. Production Management. *Spring* (3) Mr. Maddocks and Mr. Tarleton. *Prerequisites:* Bus. 331, or taking Bus. 331 concurrently.

A course designed to familiarize the student with the production phase of business activity. Emphasis is on developing ability to use analytical methods in the design and operation of production systems.

331. Business Statistics. *Fall and Spring* (3) Mr. Dafashy, Mr. Traywick and Mr. Woodward. *Prerequisites:* Six credits in mathematics, or permission of the instructor.

A study of the basic tools of statistical analysis used by the business administrator.

334. Decision Theory. *Fall and Spring* (3) Mr. Blood and Mr. Woodward.

Solution of business problems under conditions of uncertainty. Computer programming is taken up and used to assist in the solution of problems.

341. Business Law I. *Fall and Spring* (3) Mr. Jones.

Contracts, sales, negotiable instruments and agency with emphasis on the Uniform Commercial Code.

SCHOOL OF BUSINESS ADMINISTRATION

342. Business Law II. *Spring* (3) Mr. Jones. *Prerequisite:* Bus. 341.

Bailments and carriers, partnerships, corporations, unfair competition, bankruptcy, secured transactions, property, trusts, mortgages, and insurances.

411. Managerial Economics. *Spring* (3) Staff. *Prerequisites:* Econ. 101-102.

A course to provide the student with an appreciation and basic understanding of the contributions of economics applied to the decision making process.

412. Business Logistics. *Spring* (3) Staff. *Prerequisites:* Bus. 311, 327, 330, and 331.

A course to provide the student with an introduction to the total cost concept at top management level of all aspects of the physical distribution function.

414. Investments. *Spring* (3) Staff. *Prerequisites:* Bus. 201-202 and 323, or permission of the instructor.

An examination of the securities markets and the characteristics of the various types of securities for institutional and personal investment. Sources of investment information, approaches to investing, personal investment planning, and elements of analysis are introduced.

416. Business Policy. *Fall and Spring* (3) Mr. Maddocks and Mr. Warren. *Prerequisite:* Senior standing in the School of Business Administration, or permission of the instructor.

A course which deals with the establishment of company-wide objectives and the subordinate plans and controls to accomplish them. This course integrates and builds upon the business administration body of knowledge to develop decision-making ability at the policy-making level of administration.

430. Project in Business Research. *Fall and Spring* (3) Mr. Quittmeyer and Mr. Stanley. *Prerequisite:* Senior standing in the School of Business Administration, or permission of the instructor.

Independent research culminating in the preparation of a project on a topic of business interest.

GRADUATE PROGRAM

The School of Business Administration offers the degree of Master of Business Administration. For degree requirements and a full description of graduate work in Business Administration, write to the Associate Dean for Graduate Studies, School of Business Administration, for the School's Graduate Catalog.



SCHOOL OF EDUCATION

PROFESSORS BROOKS (*Dean of the School of Education*), CHESSER, CLEM, GALFO, HERRMANN, and UNGER. ASSOCIATE PROFESSORS ADAIR, BULLOCK, COWLES, FLANAGAN, GEOFFROY, GERBER, HANNY (*Director of Student Teaching*), JONES (*Associate Dean of the School of Education and Director of Graduate Studies*), LAVACH, MAIDMENT, MESSIER, O'SHELL, PRILLAMAN, RIES, and SYKES (*Director of Teacher Placement and Scholarships*). ASSISTANT PROFESSORS ABBOTT,¹ BRINKLEY (*Director of the Reading Center*), DELAUNE, GARLAND, GULESIAN, LOSITO, MATTHEWS, NELSON, and WHEELER. LECTURER BROWN.¹

UNDERGRADUATE CONCENTRATION

It is the philosophy of the School of Education that sound preparation for teaching must be based upon study in the Arts and Sciences and must include a carefully planned sequence of study in professional education supplemented by a supervised teaching experience.

Procedures and Requirements for Admission to Undergraduate Concentration

Admission to Baccalaureate study at the College of William and Mary does not include admission to undergraduate concentration in the School of Education. Students who wish to concentrate in Education must meet the admissions requirements of the School of Education.

Application for admission to the School of Education is made during the second semester of the sophomore year. Applications are also accepted (1) from students who wish to change their concentrations from some other field to Education provided this is done prior to the second semester of the senior year, and (2) from transfer students who have been admitted to the College.

The criteria for admission to undergraduate concentration in the School of Education include the following:

- (1) An overall quality-point average of at least 1.0 (3.0 scale) earned in work completed to date.²
- (2) Personal qualities which are necessary for successful teaching as indicated in a personal interview. (Information about the interview is given to the student after he has filed application.)

Application forms and information regarding admissions procedures may be obtained from the Office of the Dean, School of Education.

UNDERGRADUATE PROGRAMS OF STUDY

Those students who are admitted to the School of Education concentrate in either elementary education or secondary education. The successful completion of either of these programs will insure the student of receiving the Collegiate Professional Certificate from the State Board of Education of the Commonwealth of Virginia.³

¹ 1972-73

² In addition to the 1.0 overall quality-point average, juniors and seniors who wish to change their concentrations from some other field to Education must have at the time of application a 1.5 quality-point average in their present fields of concentration.

³ Courses at the 300 and 400 level in the School of Education may be taken only by students who have attained junior or senior status.

SCHOOL OF EDUCATION

Elementary Education

The program of studies which leads to the Bachelor of Arts degree in Elementary Education has been developed upon the basis of the belief that the most effective preparation of elementary school teachers is a liberal arts education augmented with intensive study of the theory of education and with continuous opportunity for its application. Actual experience in working with children of elementary school ages is begun early in the program and culminates with full-time student teaching which is undertaken during the Professional Semester.

The Professional Semester for Elementary Education concentrators is completed during the Fall or Spring Semester of the senior year and includes, in addition to student teaching, Education 305—Materials and Methods in the Elementary School, and Education 404—Cultural Foundations of Education. During the semester, the student is afforded opportunities for classroom observation and participation while attending classes on campus. The second half of the semester is spent in full-time student teaching supplemented with flexibly scheduled professional seminars.

The suggested program of studies described below not only satisfies the area and sequence requirements for the bachelor's degree, but also leads to certification for elementary school teaching in the Commonwealth of Virginia. In addition to the area and sequence requirements, students must meet the proficiency requirements specified in the *General Catalogue of the College of William and Mary in Virginia, 1973-74*.

AREA REQUIREMENTS

	Semester Credits
Area I. English	
English 211 and 404.	6
(Note: One course must be in composition or writing. Either English 101, 301, or 401 satisfies this requirement but does not meet area requirements)	
Area II. Economics 101, 102.	6
Area III. Geology 101, 102, Physics 103, 104, or Mathematics 105, 106.	6-8
	18-20

SEQUENCE REQUIREMENTS

Sequence requirement may be met by taking two additional courses as indicated below:

	Semester Credits
English 201, 363 or 364.	6

All Elementary Education concentrators must complete both area and sequence requirements prior to registering for the professional semester.

ADDITIONAL REQUIREMENTS IN THE
ARTS AND SCIENCES

	Semester Credits
Economics 101 or 102.	3
(If not met as an area requirement)	
Fine Arts 111 or 112.	3
History 201 or 202.	3

SCHOOL OF EDUCATION

Mathematics 105, 106.	6
(If not met as an area requirement)	
Music 320.	3
Physical Education.	6
(Must include PE 321E)	
Science.	8
Geology 101, 102 or Physics 103, 104	
(If not met as an area requirement)	
Speech	
(Speech 202 is recommended)	3

PROFESSIONAL EDUCATION

	Semester Credits
Education 301—Educational Psychology	3
Education 302—Human Growth and Development	3
Education 304—Teaching Reading in the Elementary School	3
Education 307—Teaching Mathematics in the Elementary School	3
Education 308—Diagnostic Teaching of Reading.	3
Education 321—Children’s Literature	3
	18
<i>Professional Semester</i>	
Education 305—Methods and Materials in the Elementary School	6
Education 404—Cultural Foundations of Education.	3
Education E401A—Supervised Teaching—Primary Level	
OR	
Education E401B—Supervised Teaching—Upper Level.	6
	15

ELECTIVES

Electives should be selected in cooperation with an advisor from the School of Education. The number of elective credits varies depending upon performance on proficiency examinations and other such factors.

SECONDARY EDUCATION

The student who wishes to prepare for teaching at the secondary school level is encouraged by the School of Education to concentrate, wherever possible, in the appropriate department of the Faculty of Arts and Sciences and, with the assistance of his advisor, to incorporate into his program the professional study described below.

In those cases where it is necessary to concentrate in Secondary Education, rather than in departments of the Faculty of Arts and Sciences, students must follow the undergraduate admission procedures as outlined in The Undergraduate Catalog. Those admitted who wish to prepare to teach a single subject pursue a program which includes, in addition to the professional sequence of eighteen semester hours, at least as many semester hours of study in the subject field as would be required for concentration in the appropriate department. In addition, those admitted to concentration in Secondary Education may pursue interdisciplinary programs of study which include the preparation needed for certification to teach more than one subject, e.g., the endorsement in History and the Social Sciences. Interdisciplinary programs typically include, in addition to the eighteen semester hours in Education, from forty to fifty semester hours of study in the teaching fields.

SCHOOL OF EDUCATION

Each student should become familiar with the certification requirements of the State Department of Education in regard to an endorsement in his chosen subject field. In some instances, courses are required which may not be required by the department for concentration. Information about endorsement requirements may be obtained from the Office of the Dean, School of Education.

The following program of professional preparation should be completed by all students preparing for secondary school teaching.

	<i>Semester Credits</i>
Education 301—Educational Psychology.	3
Education 302—Human Growth and Development	3
<i>Professional Semester</i>	
Education 303—Instructional Materials and Methods.	3
Education S401—Supervised Teaching	6
Education 404—Cultural Foundations of Education	3
TOTAL	18

The Professional Semester (Education 303, S401, and 404) is taken in either the Fall or Spring Semester of the senior year. It should be understood that the experiences in the subject areas indicated by the course titles are integrated to the point where the typical concept of the relatively discrete course does not apply. For this reason, each student must register for the total Professional Semester. In addition to the twelve semester hours in Education, however, the student is permitted to carry one additional three semester hour course which may be in his field of concentration. The additional course must be one that is scheduled to meet in the late afternoon or in the evening—in most cases, 3:00 p.m. or later.

ADMISSION AND PREREGISTRATION PROCEDURES FOR STUDENT TEACHING

In order to be permitted to undertake student teaching at the elementary level, concentrators must have successfully completed Education 301, Educational Psychology, Education 302, Human Growth and Development, Education 304, Teaching Reading in the Elementary School, and Education 305, Materials and Methods in the Elementary School. In addition, the Elementary Education concentrator must have the approval of his advisor to proceed with student teaching.

Those students who wish to student teach at the secondary level, whether or not they are concentrating in the School of Education, must meet the following requirements.

1. May not take more than 15 credit hours or its equivalent during the semester of student teaching.
2. Must have the approval of the department of his concentration regarding the adequacy of his subject matter preparation.
3. Must have received credit for Education 301 and 302 with the grade of "C" or better in each of these courses.
4. Prior to enrollment in student teaching, must have completed an approved field experience or a substitute acceptable to the Director of Student Teaching.

Student teachers are placed in schools in the following school divisions: Williamsburg-James City County, Newport News, York County, and Hampton.

It is necessary that students preregister for student teaching so that sufficient time is provided for making necessary arrangements with the cooperating school divisions. Preregistration must be done individually with Dr. Robert Hanny (Secondary Education), or Dr. James Cowles (Elementary Education). Preregistration for the subsequent Fall or Spring semester must be completed by April 15.

SCHOOL OF EDUCATION

DESCRIPTION OF COURSES

301. Educational Psychology. *Fall and Spring* (3) Mr. Adair, Mr. Lavach, and Mr. Ries.

A course in which current theories of learning are analyzed with emphasis upon the basic factors of motivation, learning, retention, and transfer. Special emphasis is placed on educational implications of empirical and theoretical findings.

302. Human Growth and Development. *Fall and Spring* (3) Mr. Lavach.

A course in which selected theories and research findings dealing with progressive human growth and development from conception to senescence are examined. Major emphasis is placed on genetics, sensory-motor development, cognition, personality, perception, and emotion. Educational implications are explored.

303. Instructional Materials and Methods. *Fall and Spring* (3) Mr. Garland, Mr. Gulesian, Mr. Hanny. Part of the professional semester in secondary education. *Prerequisites:* Education 301, 302, and fifteen semester credits in the subject of teaching choice.

A basic course in instructional methodology. Students plan, teach, and evaluate simulated lessons.

304. Teaching Reading in the Elementary School. *Fall and Spring* (3) Mr. Brinkley, Mr. Cowles. Part of the professional semester in elementary education. *Prerequisites:* Education 301, 302.

A basic course in the fundamentals of instruction in reading. This course is concerned with the application of the principles of learning and child development to the teaching of reading and the related language arts.

305. Materials and Methods in the Elementary School. *Fall and Spring* (6) Mr. Wheeler, Mr. Cowles. Part of the professional semester in elementary education. *Prerequisite:* Education 304.

A continuation of 304 with emphasis upon the areas of social studies, science, and physical education.

S305. The Teaching of High School Latin. *Fall or Spring* (3) Mr. J. W. Jones.
Same as Latin 405.

307. Teaching Mathematics in the Elementary School. *Fall and Spring* (3) Mr. Flanagan. *Prerequisites:* Mathematics 105, 106.

A course designed to supplement the prospective elementary school teacher's preparation in algebra and geometry while concentrating mainly on effective pedagogy and materials for the teaching of mathematics in grades K through 6.

321. Children's Literature. *Fall and Spring* (3) Mrs. Delaune.

A course including the study of children's reading interests, criteria for selection of materials, practice in evaluating materials, and a survey of the history and trends in publishing children's books.

400. Problems in Education. *Fall and Spring* (to be arranged) Staff.

A course designed for students who are capable of independent study under the direction of, and in consultation with, staff specialists. Students undertake study and research of educational problems of individual concern resulting from previous study or experience.

SCHOOL OF EDUCATION

E401A. Supervised Teaching, Primary Grades. *Fall and Spring* (To be arranged) Staff. Prerequisites: Education 301, 302, 304, 305.

A student teaching experience offered as part of the professional semester for prospective elementary school teachers at the primary level.

E401B. Supervised Teaching, Upper Elementary Grades. *Fall and Spring* (To be arranged) Staff. Prerequisites: Education 301, 302, 304, 305.

A student teaching experience offered as part of the professional semester for prospective elementary school teachers at the upper elementary level.

S401. Supervised Teaching, Secondary Level. *Fall and Spring* (To be arranged) Staff. Prerequisites: Education 301, 302.

A student teaching experience offered as part of the professional semester for prospective secondary school teachers.

404. Cultural Foundations of Education. *Fall and Spring* (3) Mr. Losito, Mr. Unger. Part of the professional semester in both elementary and secondary education.

A course dealing with the development of educational traditions, philosophical constructs underlying American practices of education, and the analysis of contemporary problems in light of this historical and philosophical background.

TEACHER SCHOLARSHIPS, LOANS AND STUDENT EMPLOYMENT

Virginia Teacher's Scholarship

In addition to the financial assistance programs administered by the Director of Student Aid and Placement for the College, undergraduate students who are Virginia residents and who plan to concentrate in Education are eligible for Teacher Training Scholarships which are administered by the School of Education. These scholarships are made possible by an appropriation of the General Assembly of Virginia and are available to freshmen, sophomores, juniors, and seniors who plan to teach in the public schools of the Commonwealth. The scholarships are for \$450 per academic year and for proportionate amounts during the Summer Session. Inquiries should be addressed as follows:

The Director of Teacher Placement and Scholarships
School of Education
College of William and Mary
Williamsburg, Virginia 23185

Kappa Delta Pi Scholarship

The Alpha Xi Chapter of Kappa Delta Pi, national honor fraternity for teachers and students in Education, annually offers a \$150 scholarship to the student displaying combined scholarship and outstanding professional qualities. Inquiries should be directed to the Director of Teacher Placement and Scholarships.

TEACHER PLACEMENT

The School maintains a Teacher Placement Office to assist its graduates who plan to teach or who are seeking changes in employment. No registration fee is charged, and all students enrolled in the School are urged to avail themselves of this service. If the students file and maintain complete records with the Placement Office, the office can be of assistance to those who go into teaching, not only at graduation, but also offer assistance to alumni making changes in their professional positions.

SCHOOL OF EDUCATION

STUDENT HONORS AND ACTIVITIES

Kappa Delta Pi

This honor society in Education was first organized in 1911, and Alpha Xi Chapter of the College of William and Mary was chartered in 1922. The purpose of Kappa Delta Pi is to encourage high professional, intellectual, and personal standards, and to recognize outstanding contributions to education. To this end the organization invites to membership persons who exhibit commendable personal qualities, worthy educational ideals, and sound scholarship. The organization endeavors to maintain a high degree of professional fellowship among its members and to quicken professional growth by honoring achievement in educational work. Both men and women are eligible for membership.

Student Education Association

This student organization, which complements the National Educational Association and the Virginia Educational Association, has been active in furthering professional competence and providing members with introductions to the national and state professional organizations. All prospective teachers are eligible for membership.

GRADUATE STUDY

Graduate study is available for those who have completed with merit an undergraduate degree program at an accredited institution. The School of Education awards the degrees of Master of Arts in Education and Master of Education in a variety of fields. In addition, the Certificate of Advanced Study (thirty semester hours beyond the Master's degree) and the Doctor of Education degree are offered in Educational Administration, Higher Educational Administration, and Counseling. For complete course descriptions and detailed information relating to the graduate program consult the *School of Education Catalog*, copies of which are available upon request from the Office of the Dean, School of Education.

MARSHALL-WYTHE SCHOOL OF LAW

PROFESSORS WHYTE (*Dean*), DONALDSON, FISCHER, JOLLS, LLEWELLYN, PHELPS, POWELL, SCOTT¹, SWINDLER and WHITNEY. ASSOCIATE PROFESSORS BROWN, COLLINS, LEAVELL, MADISON, SANTORO (*Associate Dean*)², WALCK, WHITEHEAD (*Law Librarian*) and WILLIAMSON (*Associate Dean*). VISITING ASSOCIATE PROFESSOR LANG. ASSISTANT PROFESSORS BROMBERGER², CURTIS², DUNAHOO, RENDLEMAN, SCHAEFER, SULLIVAN (*Associate Dean*) and WILLIAMS. ADJUNCT PROFESSOR FITCH. LECTURERS ANDERSON and ZEPKIN.

Law School origins date from 1779 when George Wythe was appointed professor of law, making the College of William and Mary the first to offer instruction in law. The School is named for Wythe and John Marshall, Wythe's most renowned student and later Chief Justice of the United States. Marshall-Wythe is accredited by the American Bar Association, is a member of the Association of American Law Schools and is registered by the New York State Department of Education.

BASIC PROGRAM OF STUDY AND DEGREE REQUIREMENTS

The program of study leading to the Juris Doctor degree is conducted on a semester basis. Successful completion of 90 hours of law studies and 90 weeks of residence is required. The first-year curriculum is prescribed and consists of studies in Administrative Law and Legislation, Civil Procedure, Contracts, Property and Torts. Thereafter, a varied selection of courses may be elected. In most courses instruction is based on the case method involving the critical study of judicial decisions, statutes and other legal materials.

In addition to the J.D. degree, Marshall-Wythe offers a Master of Law and Taxation degree to those holding a professional degree in law who successfully complete within one school year 24 semester hours of study in specialized and related tax subjects.

ADMISSION

Applicants are required to have achieved satisfactory scores on the Law School Admission Test and have earned a baccalaureate degree before enrolling in the Law School. In recent years more emphasis has been accorded the undergraduate grade-point average than the LSAT scores, although the two factors are balanced. Transcript evaluation by Law School Data Assembly Service is required and the standard evaluation form is utilized. While no deadline for applications has been established, those submitting applications after March preceding the June or September of desired entrance have little chance of being admitted. No specific prelaw curriculum is required. Aside from the standard evaluation form, recommendations are not required and personal interviews will be granted only for good cause.

Candidates for the Master of Law and Taxation program must have earned a professional law degree and have demonstrated a capability for graduate legal studies. Candidates with strong backgrounds in accounting, business or economics are given admission preference for this program.

EXPENSES AND FINANCIAL AID

Tuition and fees for law students are the same as for undergraduates. Total costs for law students, however, will normally exceed undergraduate costs because of the necessity of obtaining off-campus housing and the necessity of purchasing more expensive books.

¹ On leave of absence, 1972-73.

² 1972-1973

MARSHALL-WYTHE SCHOOL OF LAW

BULLETIN AND CORRESPONDENCE

Full course descriptions, complete details regarding the Law School and all degree programs are contained in the *Bulletin of the Marshall-Wythe School of Law* which will be supplied, along with admission forms, upon request. Address all correspondence to: School of Law (Admissions), College of William and Mary, Williamsburg, Va. 23185.

Forms and information pertaining to the Law School Admission Test, the Law School Data Assembly Service, the Law School Financial Assistance Service and the Prelaw Handbook may be obtained by writing to Box 944, Princeton, N.J. 08540.



THE SCHOOL OF MARINE SCIENCE

PROFESSORS HARGIS (*Dean of the School of Marine Science*), ANDREWS, BLACK, VAN ENGEL, WOOD, and ZEIGLER. ASSOCIATE PROFESSORS BENDER, BIERI, BYRNE, DAVIS, HAEFNER, HAVEN, MATTOX, NICHOLS, NORCROSS, WASS, and ZUBKOFF. ASSISTANT PROFESSORS BOESCH, CALDER, DUPUY, FANG, GOLDSMITH, GRANT, HOGMAN, HYER, JORDAN, KAZAMA, KUO, LOESCH, LYNCH, MACINTYRE, MARCELLUS, MUSICK, NEILSON, NOLAN, OTT, PERKINS, RUZECKI, SILBERHORN, SMITH, WEBB, and WELCH. INSTRUCTORS GORDON, LANIER, MERRINER, SMOLEN, WARINNER, WOJCIK and ZWERNER.

FACILITIES

Through the offerings of the School of Marine Science, a joint venture of the College and the Institute, an unusual opportunity is afforded students of Marine Science and Marine Fisheries Biology to take advanced undergraduate and graduate training at an active, year-round center of marine research.

Because its main campus is located at Gloucester Point on the York River, an important estuary with easy access to Chesapeake Bay and the nearby Atlantic, the Institute is admirably situated to conduct research and teaching in marine, estuarine, and freshwater biology and general hydrography. The secondary campus of the Eastern Shore Branch Laboratory at Wachapreague, Virginia, offers access to the embayments, salt marshes, and barrier beaches of Virginia's Eastern Shore.

PROGRAM

The program of the School of Marine Science is primarily intended for the advanced student who wishes to specialize in Marine Science or Oceanography. The degrees offered are the Master of Arts and Doctor of Philosophy in Marine Science. Majors in Biological Oceanography (Marine Biology), General Oceanography and Marine Fisheries Biology are available at both levels. Within these general areas, study in several specialties may be undertaken—for example, Physical Oceanography, Geological Oceanography, Marine Pollution Biology, etc.

Though the courses offered by the School are primarily for graduate students, advanced undergraduates (juniors and seniors) may participate. For instance, Biology, Chemistry and Physics majors may enroll in suitable 400 level courses. An undergraduate major in Chemistry, Geology, Physics, or Psychology may work on a marine problem in his field of specialization. Consent of the Chairman of the student's major department is required to take problems courses in Marine Science.

In summer qualified undergraduate students may take advanced training in Invertebrate Ecology, Marine Science, Physiology, and other subjects as scheduled. Special summer research courses in Marine Science for qualified science teachers and undergraduate biology majors are offered as funds are available. Financial assistance is generally available to qualified graduate and undergraduate students and to participating teachers.

It is recommended that students who are seriously interested in Marine Science as a profession consult with the Dean of the School as early in their college careers as possible regarding an academic program to be followed.

DESCRIPTION OF COURSES

401. Introduction to Physical Oceanography. Fall (3) Staff. Prerequisites: Physics 101-102, Math 103.

Physical properties of sea water, descriptive oceanography, air-sea interactions, heat budget, methods and measurements, dynamics of circulation, waves and tides. Lectures and laboratory.

402. Introduction to Chemical Oceanography. Fall (3) Staff. Prerequisite: Chemistry 101-102.

SCHOOL OF MARINE SCIENCE

Chemical properties and their distribution in the sea, nutrients, carbon dioxide system, methods of sea water analysis. *Lectures and laboratory.*

403. Introduction to Biological Oceanography. Fall (3) Staff.

Introduction to principles and concepts of marine ecology; characteristics of the oceans and estuaries as ecosystems. Occurrence and distribution of marine organisms in relation to hydrography. *Lectures, laboratory and field trips.*

404. Introduction to Geological Oceanography. Fall (3) Staff.

Topography and sediments of the sea floor and coastal environments. Origin of the Geological processes. *Lectures and laboratory.*

405. Problems in Marine Science. Fall and Spring (1-4) Staff.

Supervised projects selected to suit the needs of the advanced undergraduate student. Projects to be chosen in consultation with the head of the student's major department, the supervising professor and the Dean of the School of Marine Science. Acceptable topic outlines and terminal project reports are required.

406. Introduction to Marine Science. Summer session and extension (5) Staff.

A general introduction to marine science including biological, chemical, geological and physical oceanography. *Lectures, laboratory and field trips, twenty-six hours per week for five weeks.*

***407. Biometry I. Spring (3) Staff.**

Application of statistical methods to analysis of biological and physical data. Binomial and chi-square distributions, normal distribution. Student-Fisher test, introduction to analysis of variance and regression analysis. *3 lecture hours.*

410. Marine and Freshwater Invertebrates. Summer session (5) Staff.

Classification and identification, adaptation, ecology, life histories. Local marine, estuarine and freshwater forms emphasized. *Lectures, laboratory and field trips, twenty-six hours per week for five weeks.*

412. Marine Botany. Summer session (5) Staff.

A general introduction to the ecology and systematics of algae spermatophytes encountered in the marine environment. *Lectures, laboratory and field trips, twenty-six hours per week for five weeks.*

419. Computer Applications in Marine Science. As required (1) Mr. Wojcik.

Course designed primarily for students who require special Fortran programs for analysis of their research data. Following instruction in basics of programming language, each student will develop, with guidance, one or more computer programs pertinent to his or her thesis research. *One lecture hour.*

420. Workshop in Scientific Writing. Spring (1) Mr. Grant.

Step-by-step analysis of the preparation of a journal article; structure and content of research and thesis proposals. *One lecture hour.*

GRADUATE PROGRAM

The School of Marine Science offers the degrees of Master of Arts and Doctor of Philosophy. For graduate admission and degree requirements, and for a full description of graduate courses in marine science, write for a Graduate Catalog to the Dean of the School of Marine Science, Gloucester Point, Virginia 23062.

SPECIAL PROGRAMS OF THE COLLEGE

THE EVENING COLLEGE

The College initiated a program of evening courses in 1952, to enable residents of Tidewater communities to earn credits which might be applied toward a degree at William and Mary or transferred to other institutions.

The program includes a selection of graduate and undergraduate courses from the regular curricula of the College. Instruction is provided primarily by members of the regular faculty. At present students may earn graduate degrees in Business and Education by attending evening classes.

All students or prospective students may obtain assistance with program planning and related problems by appointment with the Director. Call 229-3000, Extension 238, for an appointment.

THE SUMMER SESSIONS

The Summer Sessions are an integral part of the educational program of the College of William and Mary and the opportunities for study are essentially the same as in the regular session. Courses are carefully selected from the regular curriculum. Instruction is provided by regular members of the William and Mary faculty supplemented by specialists from other institutions.

The Summer Sessions consist of two terms of five weeks each. Students may enroll for either or both terms. Courses in Law are taught on a nine-week schedule. Certain short courses for teachers are also available. Six semester hours constitutes a full course load for each five-week session.

ADMISSIONS

Prospective students who have never attended William and Mary should follow the application and registration procedures outlined in the current Evening College or the Summer Sessions Catalogues. The necessary application forms are included. Since part-time students typically do not maintain a continuous enrollment, all students are requested to submit an application form for each semester or session of Evening College and Summer Sessions which they plan to attend in order to expedite the registration process.

CATALOGS AND INFORMATIONAL MATERIALS

Catalogs which include all course offerings, class schedules and fees for Evening College are published each year in August and January. Copies may be obtained by contacting the Director of Evening College, College of William and Mary, Williamsburg, Virginia 23185.

A preliminary announcement of Summer Session, including a tentative list of course offerings, is published each January followed by a complete Summer Sessions catalog in March which includes all necessary application forms. Special bulletins are available describing the Summer Band School and other special programs. Copies may be obtained from the Director of Summer Sessions, College of William and Mary, Williamsburg, Virginia 23185.

OFFICE OF SPECIAL PROGRAMS

The Office of Special Programs was established by the Board of Visitors in September, 1972 for the purpose of developing and administering a variety of new and existing adult education programs, some of them experimental and innovative. The Office is located at the Virginia Associated Research Campus in Newport News and will serve adults in the Williamsburg-Tidewater area of Virginia. The Office of Special

SPECIAL PROGRAMS OF THE COLLEGE

Programs was created to allow the College of William and Mary to be of maximum public service by offering varied and expanding educational opportunities and experiences to those who seek education yet are unable to devote themselves to full-time or residential programs. A primary function will be to coordinate noncredit short courses, seminars, institutes and conferences at the Virginia Associated Research Campus in Newport News as well as those scheduled on the Williamsburg campus.

The broad range of subject matter offered at the College provides resources for offering non-credit courses in many fields to increasing numbers of people who seek individual self-development, improvement of professional competence, or intellectual experiences in areas of personal interest and appeal. The length and starting time of the programs are not limited by traditional College time frames and may, therefore, be scheduled for the convenience of the participants in the evenings, on weekends, during the summer or regular academic session.

The diverse professional resources of the College will be applied through courses, conferences, institutes and workshops to professional groups, both public and private, as well as the general public. In cooperation with other area institutions, the resources of the College will be utilized to satisfy society's needs in an effective and coordinated manner. The College will concentrate on those programs in which the academic resources and experience of its undergraduate, graduate and professional schools and faculties can make effective contributions.

The interests and needs of the public will be carefully researched and will constitute the basis for establishing the programs to be offered. Certificates will be issued to participants who satisfactorily complete the programs and Continuing Education Units may be awarded for courses which qualify under the standards established by the Southern Association of Colleges and Schools and the State Council on Higher Education in Virginia.

Information concerning the programs will be widely distributed to the general public as well as business and professional groups through the news media and by special bulletins and brochures.

Prospective participants may obtain information and assistance by contacting the Office of Special Programs, College of William and Mary, Virginia Associated Research Campus 12070 Jefferson Avenue, Newport News, Virginia 23606 or by calling 877-9231, extension 201.

THE VIRGINIA ASSOCIATED RESEARCH CAMPUS

THE VIRGINIA ASSOCIATED RESEARCH CAMPUS of the College of William and Mary is a graduate education and research facility located in Newport News approximately twenty-five miles from the College's main campus in Williamsburg.

Advanced courses in Applied Science, Business Administration, Education, and Engineering are routinely offered at the Research Campus, all of which carry resident graduate credit. The program in Engineering is offered by Old Dominion University; all other programs by the College of William and Mary.

Inquiries and requests for bulletins and application forms should be directed as follows: for Applied Science to Director, Applied Science Program; for Business Administration to Dean, School of Business Administration; and for Education to Dean, School of Education—all at the College of William and Mary, Williamsburg, Virginia, 23185. Inquiries concerning the Engineering Program should be directed to the Dean, School of Engineering, Old Dominion University, Norfolk, Virginia 23508.

Research programs in several disciplines are being conducted at the Research Campus. The College cooperates with institutions of higher education throughout Virginia in providing office and laboratory space, laboratory animal facilities, and electronic and machine shop assistance at the site for studies being conducted at the adjacent Space Radiation Effects Laboratory.

The Space Radiation Effects Laboratory (SREL) was constructed in 1965 by the National Aeronautics and Space Administration at a cost of \$15.5 million. It houses three particle accelerators, the largest of which is a 600 million electron volt synrocyclotron. SREL is administered through the Research Campus by the College of William and Mary under contract with NASA and is used by scientists at universities throughout the nation. Research being conducted at the site includes nuclear physics, nuclear chemistry, radiation biology, and radiation effects on materials.



PRE-PROFESSIONAL PROGRAMS

Dentistry, Engineering, Forestry, Medical Technology, Medicine, and Veterinary Medicine

Students may follow programs at William and Mary within a liberal arts framework which will prepare them for study in Dentistry, Engineering, Forestry, Medical Technology, Medicine, and Veterinary Medicine. The pre-professional programs in Engineering and Forestry are prescribed because of cooperative programs with other institutions. Students who are interested in other pre-professional programs in Dentistry, Medical Technology, Medicine, and Veterinary Medicine, should plan their programs in consultation with their advisor.

PREMEDICAL AND PREDENTAL PROGRAMS

There are no specific premedical or predental programs. Students preparing themselves for admission to medical or dental school may choose to concentrate in any department. Although medical schools in general have no preference as to major field of undergraduate study, they do believe that the student should pursue a coherent program with some depth.

A liberal education is appropriate to preparation for a career in medicine. The physician should be able to use and to understand both the written and spoken language. Moreover, those who have cultivated an interest in philosophy, history, and the arts can enrich their own lives and, in so doing, may become more effective members of their communities.

For the country at large most medical school graduates now earn their baccalaureate degree; some of these students spend only three years in the liberal arts college and receive the college degree after completing the first year in medical school or, as in the case of William and Mary, upon the completion of the medical course. Certain schools now have combined liberal arts-medical programs wherein the students spend only two years in the liberal arts college.

The foundation of medicine is the natural sciences. All medical schools include in their admission requirements four laboratory science courses: biology, inorganic chemistry, organic chemistry and general physics. The calculus is rapidly assuming the same importance. At William and Mary, the above courses are Biology 101-102, Chemistry 101-102, Chemistry 201-202, Physics 101-102, Physics 103-104 and Mathematics 201-202. Science courses in addition to these minimal requirements are required by some medical schools and viewed with favor by many others. In any case, the student's choice of courses should be balanced and should reflect his overall intellectual development.

The premedical advisors at William and Mary encourage students to complete four years before going to medical school, for a liberal arts program reaches its full meaning in the final years; to terminate such a program after three years is to lose its unique significance. Future success in medical school and in medical practice depends in great measure on the competence and attitudes developed during the liberal arts program.

Since medical schools begin to reach decisions on applicants for admission early in the senior year on the basis of records established at that time, it is advantageous that the minimal required science courses be completed in the first three years. Every pre-medical student is encouraged to seek academic guidance early in his career through scheduled consultations with a premedical advisor.

COMBINED PLANS WITH ENGINEERING SCHOOLS

"Broadly defined, engineering is the combination of art and science that makes materials and power useful to mankind." In this definition the emphasis on service to

PREPARATION FOR FORESTRY

man points to the importance of the liberal arts in the education of modern engineers. This is of particular importance to those engineers who will rise to positions of decision-making and large-scale problem solving. As technological alternatives to the problems affecting our lives occur at an increasing rate, so decisions will draw on a greater understanding of moral values, individual worth and human needs. This will require the broadest possible combination of those studies properly termed the liberal arts and sciences with those that give a mastery of technology.

Engineering schools are increasingly aware of this truth and are searching for students with the appropriate background from liberal arts colleges. More specifically, William and Mary has a loose cooperation with the Engineering Schools of Columbia University, The Johns Hopkins University and Rensselaer Polytechnic Institute. The cooperative programs are called "Combined Plans" and take two forms: The 3-2 plan leads, after three years at William and Mary and two years at the Engineering School to a bachelor's degree from both institutions. The 4-2 plan leads, after four years at William and Mary and two years at the Engineering School, to a bachelor's degree from William and Mary and a Master's Degree in Engineering.

For details of these plans the student should consult the liaison officer for Combined Plans, Professor Hans C. von Baeyer, Chairman of the Physics Department.

Preparation for Forestry

Students may prepare at William and Mary for entrance into forestry schools at other institutions. Here they obtain a sound education in the humanities and other liberal arts in addition to the sciences basic to forestry.

The College offers a special program in cooperation with the School of Forestry of Duke University. Upon completion of a five-year coordinated course of study the student will have earned the Bachelor of Science degree from William and Mary and the professional degree of Master of Forestry from Duke University. The student devotes the last two years of his program to the professional forestry curriculum of his choice at Duke, where forestry courses are open only to seniors and to graduate students.

Candidates for the forestry program should indicate to the dean of Admissions of the College of William and Mary that they wish to apply for the Liberal Arts-Forestry curriculum. Admission to the College is granted under the same conditions as for other curricula. At the end of the first semester of the third year the College will recommend qualified students for admission to the Duke School of Forestry. Each recommendation will be accompanied by the student's application for admission and by transcript of his academic record at William and Mary. No application need be made to the School of Forestry prior to this time.

Pre-Forestry Curriculum at William and Mary.

FIRST YEAR

	1st Sem.	2nd Sem.
Eng. 203-204	3	3
Classical or Modern Foreign Language (If Required)	3-4	3-4
Biol. 101, 102	4	4
Math. 103, 111 or 111, 112	3	3
Phys. Ed. 101, 102	1	1
Electives	3	3
	14-18	14-18

PREPARATION FOR FORESTRY

SECOND YEAR

	1st Sem.	2nd Sem.
Govt. 201, 202	3	3
Chem. 103, 104	4	4
Biol. 302; Biol. 206 or Biol. 412	4	4
Phys. Ed. 201, 202	1	1
Electives	3-6	3-6
	15-18	15-18

THIRD YEAR

	1st Sem.	2nd Sem.
Econ. 101, 102	3	3
Biol. 301 or Elective Biology	4	—
Biol. 419	—	4
Physics 101-102	4	4
*Electives	4-6	4-6
	15-17	15-17

* Must include two courses which satisfy sequence requirements.



V. ORGANIZATIONS OF THE COLLEGE

INSTITUTE OF EARLY AMERICAN HISTORY AND CULTURE

THE INSTITUTE of Early American History and Culture was established in 1943 by the union of certain historical research and publication activities of the College of William and Mary and The Colonial Williamsburg Foundation. The College contributed *The William and Mary Quarterly*, a historical periodical published since 1892, and the use of the rich resources of its library, while Colonial Williamsburg contributed the Williamsburg Restoration Historical Studies, its program of research fellowships, and the use of its important manuscript collections. The board of editors of the *Quarterly* and the Restoration's advisory council of historians were merged to form the first Council of the Institute, an advisory board drawn from the nation at large. The membership of the present Council is given below.

By promoting the study of early American history the Institute aims, in the words of its Constitution, "to preserve and advance understanding of the enduring contributions of the colonists and the founders of the Republic." It does so by the publication of significant books and articles in the field of early American history from the beginnings through the Jeffersonian era, by teaching and consultation, and by the acquisition of research materials on microfilm. Its collection of early American newspapers on film is one of the largest extant. Its publication of the *Virginia Gazette Index* (1950) provides the only comprehensive index to a series of important colonial newspapers so far made available to researchers.

The Institute cooperates in many ways and to the fullest possible extent with historical activities of both the College and Colonial Williamsburg, but it is an autonomous organization with a separate and distinct program which is national rather than local. Its books and the articles appearing in *The William and Mary Quarterly* are directed to the widest possible audience. The director of the Institute is Thad W. Tate. On this staff are: Norman S. Fiering, editor of publications in charge of the book publication program, and Joy Dickinson Barnes, assistant editor; Michael McGiffert, visiting editor of *The William and Mary Quarterly*; Donna Sheppard, assistant editor of the *Quarterly*, Susan Patterson, acting assistant editor; C. Richard Middleton and Kevin P. Kelly, fellows; John E. Selby, book review editor of the *Quarterly*. Herbert A. Johnson is editor, and Charles T. Cullen, associate editor of *The Papers of John Marshall*. Messrs. Tate, Middleton, Kelly, Johnson, Selby and McGiffert are members of the Department of History at the College.

The Papers of John Marshall, under a grant from the National Historical Publications Commission and an appropriation from the General Assembly of Virginia, supplemented by funds from private sources, will be a definitive edition of the works of the Chief Justice.

The offices of the Institute and of *The William and Mary Quarterly* are in the Earl Gregg Swen Library on the College campus. The postal address is Box 220, Williamsburg, Virginia 23185.

The sponsors of the Institute are Thomas A. Graves, Jr., President of the College of William and Mary, and Carlisle H. Humelsine, President of The Colonial Williamsburg Foundation.

MEMBERSHIP AND COMMITTEES OF THE INSTITUTE COUNCIL 1973—1974

Term Expires May 1974

BERNARD BAILYN, *Harvard University*
SIGMUND DIAMOND, *Columbia University*

INSTITUTE OF EARLY AMERICAN HISTORY AND CULTURE

JOHN C. MILLER, *Stanford University*
JAMES R. SHORT, *The Colonial Williamsburg Foundation*
JOHN W. SHY, *University of Michigan (secretary)*
CLARENCE L. VER STEEG, *Northwestern University*

Term Expires May 1975

WHITFIELD J. BELL, JR., *American Philosophical Society (vice chairman)*
SACVAN BERCOVITCH, *Columbia University*
GEORGE R. HEALY, *The College of William and Mary*
WILLIAM G. McLOUGHLIN, *Brown University*
JULES D. PROWN, *Yale University*

Term Expires May 1976

STANLEY N. KATZ, *University of Chicago Law School*
ROBERT MIDDLEKAUFF, *University of California, Berkeley*
J. R. POLE, *Churchill College, Cambridge*
JAMES MORTON SMITH, *State Historical Society of Wisconsin (chairman)*
WILCOMB E. WASHBURN, *The Smithsonian Institution*

Ex Officio

THOMAS A. GRAVES, JR., *The College of William and Mary*
CARLISLE H. HUMELSINE, *The Colonial Williamsburg Foundation*

Members of the Executive Committee

JAMES MORTON SMITH, <i>chairman</i>	CARLISLE H. HUMELSINE
WHITFIELD J. BELL, JR.	WILLIAM G. McLOUGHLIN
SIGMUND DIAMOND	JOHN W. SHY
THOMAS A. GRAVES, JR.	CLARENCE L. VER STEEG

Publications Committee: MESSRS. BAILYN, BERCOVITCH, BELL, HEALY, KATZ, MILLER, POLE, VER STEEG

William and Mary Quarterly Board: MESSRS. DIAMOND, McLOUGHLIN, MIDDLEKAUF, PROWN, SHORT, SHY, SMITH, TATE, WASHBURN

THE MARSHALL-WYTHE INSTITUTE FOR RESEARCH IN THE SOCIAL SCIENCES

The Marshall-Wythe Institute for Research in the Social Sciences serves to develop and coordinate research among the Social Sciences and between social scientist and the faculty of other disciplines. Services provided by the Institute include 1) the Virginia Election Data Bank which contains state, city and county and precinct data on Virginia elections dating from 1892, 2) census data tapes and other government data sources not available in Swem Library, and 3) enrollment in the Roper Data Service.

In addition to its role as a research organization, the Institute conducts the Marshall-Wythe Symposium, arranges lectures on current topics relating to the Social Sciences, and promotes the exchange of information and expertise between the College and the community. In 1926, through the generosity of James Goold Cutler, Rochester, New York, a fund was established, the income to be applied toward a lecture series. This series has developed into the Marshall-Wythe Symposium which carries one semester hour of credit. The Symposium is generally conducted during the Spring semester and a student may, in successive terms, receive a maximum of two credits.

The Institute consists of a Director, Clyde A. Haulman, Associate Professor of Economics, and representatives from the Departments of Economics, Government, History, Sociology, Anthropology, the School of Business Administration, and the Marshall-Wythe School of Law.



THE SOCIETY OF THE ALUMNI

The Society of the Alumni of the College of William and Mary in Virginia was founded in 1842 and incorporated on March 17, 1923. Its purpose is to organize the alumni of the College of William and Mary in one general body, in order to keep alive the memories of college life and promote the welfare of the College. Any graduate or any alumnus who has completed one regular college semester at the College in Williamsburg is eligible for membership in the Society. Contributors to The William and Mary Fund are accorded all membership privileges. *The Alumni Gazette*, the official publication of the Society, is sent to all known living alumni and parents of current students.

Alumni chapters are located in many major cities and areas of alumni concentrations. The Society over the years has supported the scholarly activities of the College through the Alumni Summer Research Grants, and the Alumni Fellows designations to outstanding younger faculty members.

The officers of the Society are Colin R. Davis, '50, President; Chester F. Giermak, '50, Vice President; Allen Clarence Tanner, '46, Secretary-Treasurer; Gordon Cheesman Vliet, '54, Executive Secretary.

The members of the Board of Directors of the Society are:

To December 1973—Guy Wilson Daugherty, '34, Rochester, Minnesota; Chester F. Giermak, '50, Erie, Pennsylvania; Paul Kormick Lapolla, '41, Del Mar, California; Marjorie Jean Retzke (Gibbs), '44, Bay Village, Ohio; Allen Clarence Tanner, '46, Newport News, Virginia.

To December 1974—Dan Hutcheson Edmonson, '38, Glen Ellyn, Illinois; Jane Harden (Hanson), '42, Potomac, Maryland; Glen Edward McCaskey, '63, Hilton Head Island, South Carolina; John Flood Morton, Jr., '58, Metairie, Louisiana; William Lunsford Person, '24, Williamsburg, Virginia.

To December 1975—Jean Miller Canoles (Bruce), '49, Norfolk, Virginia; Colin R. Davis, '50, Suffolk, Virginia; Fred Leon Frechette, '46, Richmond, Virginia; John William Hornsby, Jr., '50, Newport News, Virginia; Harriet Nachman (Storm), '64, Hampton, Virginia.

The members of the Alumni Board of Trustees of the Alumni Endowment of the College of William and Mary are: Fred Monroe Flanary, '50, Williamsburg, Virginia; Robert Stanley Hornsby, '41, Williamsburg, Virginia; Edward Nelson Islin, '25 Newport News, Virginia; Jay Wilfred Lambert, '27, Williamsburg, Virginia; ex officio the President of the Society of the Alumni.

The Alumni Offices are located in the Alumni House on Richmond Road at the stadium, the former Bright House.

THE ASSOCIATION OF PARENTS

The objectives of the Association are to promote a better understanding of the mission, goals, and policies of William and Mary; to interpret to parents and others the benefits of the liberal and professional education offered by the College; to aid in the placement programs of William and Mary so as to expand career opportunities for graduating students; and to promote the development of the College by assisting it to increase its private financial support from individuals, corporations, and foundations.

The membership of the Association includes all parents of enrolled students and those parents of former students who continue to contribute to the Association's Parents' Fund. The Steering Committee of the Association is composed of a minimum of seventeen persons who are parents or guardians of enrolled and recently enrolled students.

The Steering Committee of the Association meets at least once annually to choose officers and plan activities for the academic year. Activities generally include a Parents' Day and an annual solicitation of financial support from among all parents.

More information on the Association of Parents is available through the Office of College Development at the College of William and Mary in Virginia.

VI. Miscellaneous Information

ENROLLMENT

Session 1972-73

	Men	Women	Total
Freshmen	637	627	1264
Sophomores	513	467	980
Juniors	451	415	866
Seniors	409	398	807
Law School	421	41	462
Graduate	328	141	469
Auditors	10	18	28
	<u>2769</u>	<u>2107</u>	<u>4876</u>

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Session 1972-73

Alabama	10
Alaska	1
Arkansas	5
California	16
Colorado	2
Connecticut	52
Delaware	20
District of Columbia	13
Florida	44
Georgia	23
Idaho	2
Illinois	26
Indiana	17
Iowa	6
Kansas	5
Kentucky	13
Louisiana	4
Maine	3
Maryland	139
Massachusetts	41
Michigan	22
Minnesota	1
Mississippi	3
Missouri	6
Montana	1
Nebraska	4
New Hampshire	4
New Jersey	226
New Mexico	2
New York	171
North Carolina	37
Ohio	56
Oklahoma	5

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Oregon	3
Pennsylvania	217
Rhode Island	8
South Carolina	20
Tennessee	12
Texas	14
Vermont	3
Virginia	3528
Washington	6
West Virginia	15
Wisconsin	5
Algeria	1
Belgium	7
British Honduras	1
Canada	1
Canary Islands	1
Costa Rica	1
France	2
Germany	1
Greece	2
Haiti	1
Hong Kong	2
India	1
Iran	1
Kenya	1
Malasia	1
Mexico	2
Netherlands	1
Nigeria	1
Palestine	1
Panama Canal Zone	2
Philippines	1
Puerto Rico	1
South Korea	1
South Viet Nam	3
Switzerland	1
Taiwan	13
Thailand	1
United Kingdom	10
Venezuela	1
Virgin Islands	2
	<hr/>
	4876

INDEX

Academic Regulations and Requirements	46
Academic Regulations	59
Academic Scholarships	45
Accounting	171
Activities, Extracurricular	34
Administrative Offices, Directory of	8
Admission to the College	46
Admission, Undergraduate, to the School of Business Administration	48
Admission, Undergraduate, to the School of Education	49
Admission to Graduate Study	49
Advanced Placement	56
Alumni, The Society of the	195
Anthropology	66
Applied Music, Courses in	133
Applied Science, Graduate Program in	168
Area Requirements	57
Association of Parents	195
Athletics	39
Automobile Regulations	34
Biology	70
Board of Student Affairs	35
Board of Visitors	7
Books, Cost of	52
Business Administration, School of	159
Calendar, College	v
Campus	3
Cashing Students' Checks	50
Certification of Teachers	176
Chancellors of The College	6
Chemistry	75
Classical Civilization	81
Classical Studies	78
Classification of Students	60
Class Attendance	62
College-Wide Reading Program	38
Committees of the Board of Visitors	7
Comparative Literature	83
Concentration and Fields of Concentration	57
Concerts	38
Contents	iii
Continuance in College	60
Corporate Relations and Placement, Office of	42
Correspondence Directory	ii
Counseling	42
Credits from Other Institutions	61
Dance	145
Dean of Students, Office of	41
Debaters, The William and Mary	37
Degrees Offered	54
Degree Requirements for A.B. and B.S.	55
Degree Requirements for B.B.A.	169
Departmental Honors Program	58
Economics	85
Education, School of	175
Emeriti Faculty	11
English Language and Literature	89
Enrollment—Session 1972-1973	196
Evening College	186
Examinations	63

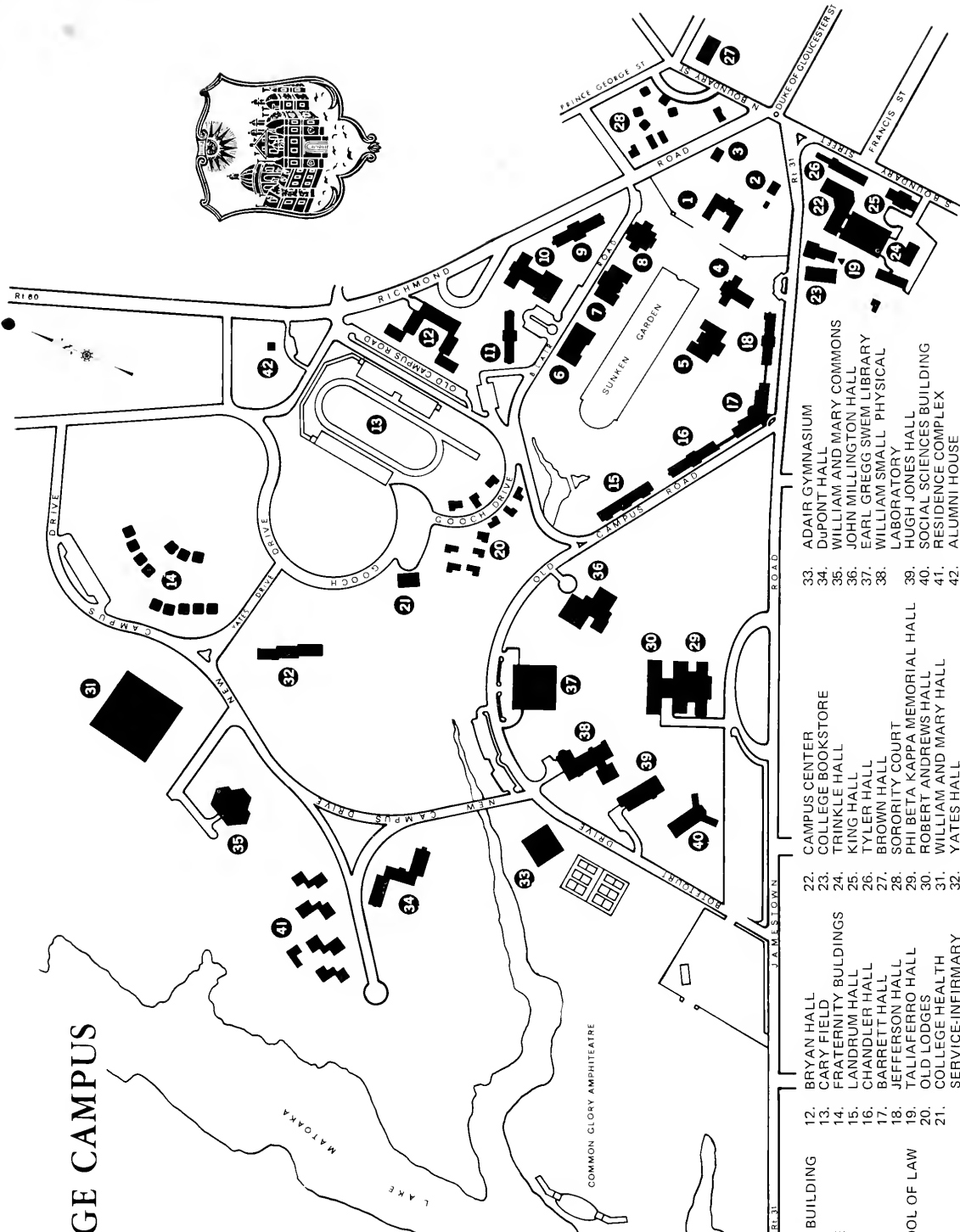
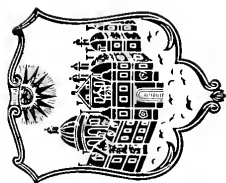
INDEX

Exhibitions	38
Expenses	50
Extracurricular Activities	34
Evaluation of Credits from Other Institutions	61
Faculty	11
Faculty of Arts and Sciences	66
Fields of Concentration and Course Descriptions	65
Financial Assistance for Students	44
Fine Arts	95
Fraternalities	36
General Statement of Policy	cover II
Geographical Distribution of Students, 1972-1973	196
Geography	101
Geology	99
Government	102
Grading, System of	63
Graduate Study, Admission	49
Graduate Study, Degrees Offered	63
Greek	78
Harrison, James Pinckney Chair of History	112
Health Services	41
Health Services Staff	32
History of the College	2
History	107
Honor Societies	36
Honor System	35
Honors Program, Departmental	58
Institute of Early American History and Culture	192
Interdisciplinary Concentration	113
Language Houses	121
Latin	79
Law, Introduction to	113
Lectures	38
Library Staff	32
Management	172
Marine Science, School of	184
Marshall-Wythe Institute for Research in the Social Sciences	194
Marshall-Wythe School of Law	182
Mathematics	114
Medical Attention	41
Military Science (Army)	119
Modern Languages	121
Motor Vehicles, Possession and Use of	34
Music	130
Musical Activities	38
Non-Virginia Students, Tuition and Fees	51
Objectives of the College	1
Office of Special Programs	186
Officers of Administration	8
Organizations of the College	192
Parents, Association of	195
Phi Beta Kappa Society	35
Philosophy	136
Physical Education for Men	140
Physical Education for Women	144
Physics	147
Placement	42

INDEX

Pre-Engineering Program	189
Pre-Forestry Program	190
Pre-Medical and Pre-Dental Programs	189
Presidents of the College	5
Proficiencies	56
PROJECT PLUS	33, 59, 135
Program, Student's Academic	59
Psychological Services, Center for	42
Psychology	151
Publications, Student	36
Quality Points	63
Registration, Changes in	62
Religion	154
Requirements for Degrees	54, 169
Residence	33
Residence Requirements for Degrees	55
Residence Halls	4, 33
Room Deposits	52
Room Rent	52
Reserve Officers' Training Corps	119
Scholarships	45, 180
Sequence Requirements	57
Sir Christopher Wren Building	3
Sociology	157
Sororities	36
Special Programs	186
Speech, Courses in	166
Students' Accounts Due	56
Student Affairs	33
Student Employment	45
Student Government	35
Student Personnel Services	41
Student Life	33
Student Teaching, Admission and Preregistration Procedures for	178
Summer Sessions	186
Teacher Education	175
Teacher Placement	180
Television and Radio	39
Theatre	163
Theatre, The William and Mary	37
Tuition and Expenses	50
Undergraduate Student Conduct	33
Virginia Associated Research Campus	188
Women's Dormitory Association	35
Withdrawal from College	61

THE COLLEGE CAMPUS



1. SIR CHRISTOPHER WREN BUILDING
2. THE BRAFFERTON
3. THE PRESIDENT'S HOUSE
4. EVELL HALL
5. WASHINGTON HALL
6. JAMES BLAIR HALL
7. ROGERS HALL
8. MARSHALL-WYTHE SCHOOL OF LAW
9. MONROE HALL
10. BLOW GYMNASIUM
11. OLD DOMINION HALL

12. BRYAN HALL
13. CARY FIELD
14. FRATERNITY BUILDINGS
15. LANDRUM HALL
16. CHANDLER HALL
17. BARRETT HALL
18. JEFFERSON HALL
19. TALIAFERRO HALL
20. OLD LODGES
21. COLLEGE HEALTH
- SERVICE-INFIRMARY

22. CAMPUS CENTER
23. COLLEGE BOOKSTORE
24. TRINKLE HALL
25. KING HALL
26. TYLER HALL
27. BROWN HALL
28. SORORITY COURT
29. PHI BETA KAPPA MEMORIAL HALL
30. ROBERT ANDREWS HALL
31. WILLIAM AND MARY HALL
32. YATES HALL

33. ADAIR GYMNASIUM
34. DUPONT HALL
35. WILLIAM AND MARY COMMONS
36. JOHN MILLINGTON HALL
37. EARL GREGG SWEM LIBRARY
38. WILLIAM SMALL PHYSICAL LABORATORY
39. HUGH JONES HALL
40. SOCIAL SCIENCES BUILDING
41. RESIDENCE COMPLEX
42. ALUMNI HOUSE



William & Mary

UNDERGRADUATE CATALOG 1973-74